

**Model Data**

Project file	2023.09.28 IES H03.mit
Source HVAC file	-
HVAC file snapshot	-
Model floor area	406,795.4 m <sup>2</sup>
Building conditioned floor area	17,208.6 m <sup>2</sup>
Building conditioned volume	90,591.8 m <sup>3</sup>
Number of conditioned rooms	504
Load analysis methodology	ASHRAE Heat Balance Method
Calculated	2024/09/28 10:14
Version No.	2022.4.0.0

**Location Data**

Location	Riyadh King Salman Ab, Saudi Arabia
Latitude	24.72 N
Longitude	46.73 E
Altitude	635.0 m
Time Zone	3.0 hours ahead of GMT

**Design Weather Data**

Source	ASHRAE design weather database
Monthly percentile:	
For heating loads design weather	99.60 %
For cooling loads design weather	0.40 %
Barometric pressure	93,952.8 Pa
Air density	1.200 kg/m <sup>3</sup>
Air specific heat	1.019 kJ/kg·K
Density-specific heat product	1.223 kJ/m <sup>3</sup> ·K
Summer ground reflectance	0.2
Winter ground reflectance	0.2
Carbon dioxide (ambient)	400.00 ppm

**Cooling Calculation Data**

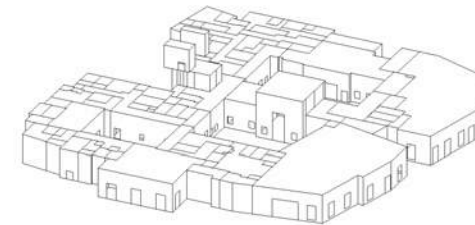
Results file	IES HOTEL - 03.clg
Calculated	2024/09/28 10:14
Profile Month	May - Oct
Max outdoor temp. dry bulb	44.7 °C
Max outdoor temp. wet bulb	19.3 °C

**Heating Calculation Data**

Results file	IES HOTEL - 03.htg
Calculated	2024/09/28 10:09
Profile Month	Jan
Outdoor winter design temp	5.9 °C

**Project Loads Summary**

	kW	W/m <sup>2</sup>
Cooling loads:		
Coincident peak space load	1,104.43	2.71
Heating loads:		
Coincident peak space load	193.02	0.47



# Third Party; LEED Platinum Certification for School - Example Checklist of Compliance in School project.



## LEED v4 for BD+C: Schools Project Checklist

Project Name: GEMS School, Dubai Sports City  
Date: 26.01.2024

Y ? N

1	0	0	Credit	Integrative Process	1
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12	0	3	<b>Location and Transportation</b>		<b>15</b>
1	0	0	Credit	Sensitive Land Protection	1
1	0	1	Credit	High Priority Site	2
5	0	0	Credit	Surrounding Density and Diverse Uses	5
2	0	2	Credit	Access to Quality Transit	4
1	0	0	Credit	Bicycle Facilities	1
1	0	0	Credit	Reduced Parking Footprint	1
1	0	0	Credit	Green Vehicles	1

7	2	3	<b>Sustainable Sites</b>		<b>12</b>
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
1	0	0	Credit	Site Assessment	1
2	0	0	Credit	Site Development - Protect or Restore Habitat	2
1	0	0	Credit	Open Space	1
0	0	3	Credit	Rainwater Management	3
1	1	0	Credit	Heat Island Reduction	2
0	1	0	Credit	Light Pollution Reduction	1
1	0	0	Credit	Site Master Plan	1
1	0	0	Credit	Joint Use of Facilities	1

10	0	2	<b>Water Efficiency</b>		<b>12</b>
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2	0	0	Credit	Outdoor Water Use Reduction	2
7	0	0	Credit	Indoor Water Use Reduction	7
0	0	2	Credit	Cooling Tower Water Use	2
1	0	0	Credit	Water Metering	1

18	2	11	<b>Energy and Atmosphere</b>		<b>31</b>
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
4	2	0	Credit	Enhanced Commissioning	6
12	0	4	Credit	Optimize Energy Performance	16
1	0	0	Credit	Advanced Energy Metering	1
0	0	2	Credit	Demand Response	2
0	0	5	Credit	Renewable Energy Production	5
1	0	0	Credit	Enhanced Refrigerant Management	1

4	7	2	<b>Materials and Resources</b>		<b>13</b>
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
0	4	1	Credit	Building Life-Cycle Impact Reduction	5
1	1	0	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1	1	0	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
0	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2	0	0	Credit	Construction and Demolition Waste Management	2

9	6	1	<b>Indoor Environmental Quality</b>		<b>16</b>
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
Y			Prereq	Minimum Acoustic Performance	Required
2	0	0	Credit	Enhanced Indoor Air Quality Strategies	2
1	2	0	Credit	Low-Emitting Materials	3
1	0	0	Credit	Construction Indoor Air Quality Management Plan	1
1	1	0	Credit	Indoor Air Quality Assessment	2
1	0	0	Credit	Thermal Comfort	1
1	1	0	Credit	Interior Lighting	2
1	1	1	Credit	Daylight	3
1	0	0	Credit	Quality Views	1
0	1	0	Credit	Acoustic Performance	1


5	1	0	<b>Innovation</b>		<b>6</b>
4	1	0	Credit	Innovation	5
1	0	0	Credit	LEED Accredited Professional	1

4	0	0	<b>Regional Priority</b>		<b>4</b>
1	0	0	Credit	Regional Priority: Specific Credit	1
1	0	0	Credit	Regional Priority: Specific Credit	1
1	0	0	Credit	Regional Priority: Specific Credit	1
1	0	0	Credit	Regional Priority: Specific Credit	1

70	18	22	<b>TOTALS</b>		<b>Possible Points: 110</b>
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**Certified:** 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

Third Party; LEED Silver Certification for School - Example  
Detailed Checklist of Compliance in School project.

			<b>LEED v4.1 for BD+C: Schools</b>		
			<b>LEED Scorecard</b>		
			<b>Project Name - Bright British School, Dubai</b>		
Points Achieved	Points May Be Targeted	Points Not Targeted	Credit		Maximum Available Points
<b>1</b>	<b>0</b>	<b>0</b>	<b>IP</b>	<b>Integrative Process</b>	<b>1</b>
1	0	0	<i>Credit</i>	Integrative Process	1
<b>10</b>	<b>0</b>	<b>5</b>	<b>LT</b>	<b>Location &amp; Transportation</b>	<b>15</b>
1	0	0	<i>Credit</i>	Sensitive Land Protection	1
1	0	1	<i>Credit</i>	High Priority Site and Equitable Development	2
3	0	2	<i>Credit</i>	Surrounding Density and Diverse Uses	5
2	0	2	<i>Credit</i>	Access to Quality Transit	4
1	0	0	<i>Credit</i>	Bicycle Facilities	1
1	0	0	<i>Credit</i>	Reduced Parking Footprint	1
1	0	0	<i>Credit</i>	Green Vehicles	1
<b>7</b>	<b>1</b>	<b>4</b>	<b>SS</b>	<b>Sustainable Sites</b>	<b>12</b>
Y	Y	Y	<i>Prereq</i>	Construction Activity Pollution Prevention	Required



**LEED v4.1 for BD+C: Schools**

**LEED Scorecard**

**Project Name - Bright British School, Dubai**

<b>Points Achieved</b>	<b>Points May Be Targeted</b>	<b>Points Not Targeted</b>	<b>Credit</b>		<b>Maximum Available Points</b>
Y	Y	Y	<i>Prereq</i>	Environmental Site Assessment	Required
1	0	0	<i>Credit</i>	Site Assessment	1
2	0	0	<i>Credit</i>	Site Development- Protect or Restore Habitat	2
1	0	0	<i>Credit</i>	Open Space	1
1	0	2	<i>Credit</i>	Rainwater Management	3
1	0	1	<i>Credit</i>	Heat Island Reduction	2
0	0	1	<i>Credit</i>	Light Pollution Reduction	1
1	0	0	<i>Credit</i>	Site Master Plan	1
0	1	0	<i>Credit</i>	Joint Use of Facilities	1
<b>7</b>	<b>1</b>	<b>4</b>	<b>WE</b>	<b>Water Efficiency</b>	<b>12</b>
Y	Y	Y	<i>Prereq</i>	Outdoor Water Use Reduction	Required
Y	Y	Y	<i>Prereq</i>	Indoor Water Use Reduction	Required
Y	Y	Y	<i>Prereq</i>	Building-Level Water Metering	Required
1	0	1	<i>Credit</i>	Outdoor Water Use Reduction	2
4	0	3	<i>Credit</i>	Indoor Water Use Reduction	7
1	1	0	<i>Credit</i>	Optimize Process Water Use	2
1	0	0	<i>Credit</i>	Water Metering	1
<b>15</b>	<b>0</b>	<b>16</b>	<b>EA</b>	<b>Energy and Atmosphere</b>	<b>31</b>



## LEED v4.1 for BD+C: Schools

### LEED Scorecard

**Project Name - Bright British School, Dubai**

Points Achieved	Points May Be Targeted	Points Not Targeted	Credit		Maximum Available Points
Y	Y	Y	<i>Prereq</i>	Fundamental Commissioning and Verification	Required
Y	Y	Y	<i>Prereq</i>	Minimum Energy Performance	Required
Y	Y	Y	<i>Prereq</i>	Building-Level Energy Metering	Required
Y	Y	Y	<i>Prereq</i>	Fundamental Refrigerant Management	Required
6	0	0	<i>Credit</i>	Enhanced Commissioning	6
6	0	10	<i>Credit</i>	Optimize Energy Performance	16
1	0	0	<i>Credit</i>	Advanced Energy Metering	1
0	0	2	<i>Credit</i>	Grid Harmonization	2
1	0	4	<i>Credit</i>	Renewable Energy	5
1	0	0	<i>Credit</i>	Enhanced Refrigerant Management	1
<b>5</b>	<b>0</b>	<b>8</b>	<b>MR</b>	<b>Material and Resources</b>	<b>13</b>
Y	Y	Y	<i>Prereq</i>	Storage and Collection of Recyclables	Required
Y	Y	Y	<i>Prereq</i>	Construction and Demolition Waste Management	Required
0	0	5	<i>Credit</i>	Building Life-Cycle Impact Reduction	5
1	0	1	<i>Credit</i>	Environmental Product Declarations	2



**LEED v4.1 for BD+C: Schools**

**LEED Scorecard**

**Project Name - Bright British School, Dubai**

<b>Points Achieved</b>	<b>Points May Be Targeted</b>	<b>Points Not Targeted</b>	<b>Credit</b>		<b>Maximum Available Points</b>
1	0	1	<i>Credit</i>	Sourcing of Raw Materials	2
1	0	1	<i>Credit</i>	Material Ingredients	2
2	0	0	<i>Credit</i>	Construction and Demolition Waste Management	2
<b>7</b>	<b>1</b>	<b>8</b>	<b>IEQ</b>	<b>Indoor Environmental Quality</b>	<b>16</b>
Y	Y	Y	<i>Prereq</i>	Minimum Indoor Air Quality Performance	Required
Y	Y	Y	<i>Prereq</i>	Environmental Tobacco Smoke Control	Required
Y	Y	Y	<i>Prereq</i>	Minimum Acoustic Performance	Required
1	0	1	<i>Credit</i>	Enhanced Indoor Air Quality Strategies	2
0	0	3	<i>Credit</i>	Low-Emitting Materials	3
1	0	0	<i>Credit</i>	Construction Indoor Air Quality Management Plan	1
1	0	1	<i>Credit</i>	Indoor Air Quality Assessment	2
1	0	0	<i>Credit</i>	Thermal Comfort	1
1	0	1	<i>Credit</i>	Interior Lighting	2



**LEED v4.1 for BD+C: Schools**

**LEED Scorecard**

**Project Name - Bright British School, Dubai**

<b>Points Achieved</b>	<b>Points May Be Targeted</b>	<b>Points Not Targeted</b>	<b>Credit</b>		<b>Maximum Available Points</b>
2	0	1	<i>Credit</i>	Daylight	3
0	1	0	<i>Credit</i>	Quality Views	1
0	0	1	<i>Credit</i>	Acoustic Performance	1
<b>3</b>	<b>1</b>	<b>2</b>	<b>IN</b>	<b>Innovation</b>	<b>6</b>
2	1	2	<i>Credit</i>	Innovation	5
1	0	0	<i>Credit</i>	LEED Accredited Professional	1
<b>0</b>	<b>4</b>	<b>0</b>	<b>RP</b>	<b>Regional Priority</b>	<b>4</b>
0	1	0	<i>Credit</i>	Regional Priority: Specific Credit	1
0	1	0	<i>Credit</i>	Regional Priority: Specific Credit	1
0	1	0	<i>Credit</i>	Regional Priority: Specific Credit	1
0	1	0	<i>Credit</i>	Regional Priority: Specific Credit	1
<b>55</b>	<b>8</b>	<b>47</b>	<b>Totals</b>	<b>Max. Possible Points</b>	<b>110</b>

**Certified: 40-49 points; Silver: 50-59 points; Gold: 60-79 points; Platinum: 80+ points**



## LEED certification review report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by Green Business Certification Inc. (GBCI®).

### MAD Make a Difference

**Project ID** 1000149111  
**Rating system & version** LEED V4 ID+C: RETAIL  
**Project registration date** 09/09/2021



### Design and Construction Final Review Decision

Certified: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80+


### LEED v4 ID+C: Retail

Attempted: 69, Denied: 13, Pending: 0, Awarded: 56 of 110 points

<b>INTEGRATIVE PROCESS</b> <b>1 OF 2</b>	<b>MATERIALS AND RESOURCES</b> <b>3 OF 14</b>
Integrative Process 1 / 2	Storage and Collection of Recyclables Y
<b>LOCATION AND TRANSPORTATION</b> <b>15 OF 18</b>	Construction and Demolition Waste Mgmt Planning Y
LEED for Neighborhood Development Location 0 / 18	Long-Term Commitment 0 / 1
Surrounding Density and Diverse Uses 8 / 8	Interiors Life-Cycle Impact Reduction 0 / 5
Access to Quality Transit 7 / 7	Product disclosure & optimization - Environmental Product Declarations 1 / 2
Bicycle Facilities 0 / 1	Product disclosure & optimization - Sourcing of Raw Materials 0 / 2
Reduced Parking Footprint 0 / 2	Product disclosure & optimization - Material Ingredients 0 / 2
<b>WATER EFFICIENCY</b> <b>2 OF 12</b>	Construction and Demolition Waste Mgmt 2 / 2
Indoor Water Use Reduction Y	<b>INDOOR ENVIRONMENTAL QUALITY</b> <b>7 OF 16</b>
Indoor Water Use Reduction 2 / 12	Minimum IAQ Performance Y
<b>ENERGY AND ATMOSPHERE</b> <b>23 OF 38</b>	Environmental Tobacco Smoke Control Y
Fundamental Commissioning and Verification Y	Enhanced IAQ Strategies 1 / 3
Minimum Energy Performance Y	Low-Emitting Materials 1 / 3
Optimize Energy Performance 17 / 25	Construction IAQ Mgmt Plan 1 / 1
Fundamental Refrigerant Mgmt Y	IAQ Assessment 1 / 2
Enhanced Commissioning 4 / 5	Thermal Comfort 1 / 1
Advanced Energy Metering 1 / 2	Interior Lighting 2 / 2
Renewable Energy Production 0 / 3	Daylight 0 / 3
Enhanced Refrigerant Mgmt 1 / 1	Quality Views 0 / 1
Green Power and Carbon Offsets 0 / 2	<b>INNOVATION</b> <b>1 OF 6</b>
	Innovation 1 / 5
	LEED Accredited Professional 0 / 1
	<b>REGIONAL PRIORITY CREDITS</b> <b>4 OF 4</b>
	Optimize Energy Performance 1 / 1
	Low-Emitting Materials 1 / 1
	Thermal Comfort 1 / 1
	Interior Lighting 1 / 1
	<b>TOTAL</b> <b>56 OF 110</b>



# Mandatory local regulations followed - Example Checklist of DBC Green Building Compliance in residential project.

Dubai Building Code 2021 Green Building Compliance Statement - NOC BP					
					
Residential building G+2P+10F+R on Plot No.DIA-RE-0105, Dubai Islands, Dubai, UAE					
S.No	Item	Description	Compliance Requirement	Complied Yes/No	List of Supporting Documents attached
1	B.6.5.2.1	Minimum area of Windows	As Highlighted in Section B.6.5.2.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
2	B.7.2.6.2	Preferred Parking	As Highlighted in Section B.7.2.6.2 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
3	B.7.2.7	Bicycle parking provision in Building	As Highlighted in Section B.7.2.7 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
4	B.8.5.1	Waste Management Hierarchy	As Highlighted in Section B.8.5.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
5	B.8.5.2.1	Waste Storage Rooms	As Highlighted in Section B.8.5.2.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
6	B.8.5.3	Recycling and segregation	As Highlighted in Section B.8.5.3 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
7	B.8.5.7	Refuse Chutes	As Highlighted in Section B.8.5.7 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
8	B.10.1	Healthy Entrances	As Highlighted in Section B.10.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
9	B.10.4	Smoking area	As Highlighted in Section B.10.4 of Part - B, DBC 2022	Yes	Please refer respective folder for compliance supporting documents
10	B.10.5.1	Local Species	As Highlighted in Section B.10.5.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
11	B.10.5.2	Shading of public access	As Highlighted in Section B.10.5.2 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
12	B.10.5.3	Heat Island effect reduction - surface shading	As Highlighted in Section B.10.5.3 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
13	B.10.6.1	Recycled Materials	As Highlighted in Section B.10.6.1 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
14	B.10.6.2	Regional Materials	As Highlighted in Section B.10.6.2 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
15	B.10.6.3	Asbestos-containing materials	As Highlighted in Section B.10.6.3 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
16	B.10.6.5	Composite timber Products	As Highlighted in Section B.10.6.5 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
17	B.10.6.6	Certified/accredited timber	As Highlighted in Section B.10.6.6 of Part - B, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
18	E.5.1	Energy Compliance method	As Highlighted in Section E.5.1 of Part - E, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
19	E.5.4	Thermal bridges	As Highlighted in Section E.5.4 of Part - E, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
20	E.5.7	Heat Island effect reduction	As Highlighted in Section E.5.7 of Part - E, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
21	E.5.8	Exterior light power, pollution and controls	As Highlighted in Section E.5.8 of Part - E, DBC 2021	Yes	Please refer respective folder for Narrative
22	H.4.8.2	Exhaust air energy recovery	As Highlighted in Section H.4.8.2 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
23	H.4.8.3	Demand Controlled Ventilation	As Highlighted in Section H.4.8.3 of Part - H, DBC 2021	NA	Please refer respective folder for Narrative
24	H.4.9.1	Infiltration/air leakage	As Highlighted in Section H.4.9.1 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
25	H.4.10.2	Minimum ventilation requirements for adequate indoor air quality	As Highlighted in Section H.4.10.2 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
26	H.4.10.3	Indoor air quality	As Highlighted in Section H.4.10.3 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
27	H.4.10.4	Air Inlets and exhausts	As Highlighted in Section H.4.10.4 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
28	H.4.12.5	Air Filters	As Highlighted in Section H.4.12.5 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
29	H.4.13.10.2	Refrigerant and ozone depletion management	As Highlighted in Section H.4.13.10.2 of Part - H, DBC 2021	yes	Please refer respective folder for compliance supporting documents
30	H.4.14.1	Controls for HVAC systems	As Highlighted in Section H.4.14.1 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
31	H.4.14.4	Air-conditioning metering	As Highlighted in Section H.4.14.4 of Part - H, DBC 2021	yes	Please refer respective folder for compliance supporting documents
32	H.5.2.2	Water efficient fittings	As Highlighted in Section H.5.2.2 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
33	H.5.2.3	Condensate Drainage	As Highlighted in Section H.5.2.3 of Part - H, DBC 2021	yes	Please refer respective folder for compliance supporting documents
34	H.5.2.4	Condensate Reuse	As Highlighted in Section H.5.2.4 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
35	H.5.2.5	Water-Efficient irrigation	As Highlighted in Section H.5.2.5 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
36	H.5.2.6.2	Sub meters	As Highlighted in Section H.5.2.6.2 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
37	H.5.3	Sustainable water heating system	As Highlighted in Section H.5.3 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
38	H.5.4.6	Irrigation water supply	As Highlighted in Section H.5.4.6 of Part - H, DBC 2021	yes	Please refer respective folder for compliance supporting documents
39	H.7.2	Lighting power densities - Interior	As Highlighted in Section H.7.2 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
40	H.7.3	Lighting power densities - Exterior	As Highlighted in Section H.7.3 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents
40	H.7.4	Lighting Controls	As Highlighted in Section H.7.4 of Part - H, DBC 2021	yes	Please refer respective folder for compliance supporting documents
42	H.7.5	Electronic ballasts	As Highlighted in Section H.7.5 of Part - H, DBC 2021	NA	Please refer respective folder for compliance supporting documents
43	H.8	Commissioning	As Highlighted in Section H.8 of Part - H, DBC 2021	Yes	Please refer respective folder for compliance supporting documents