

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: HALO

Report Number: P626458

Luminaire Tested: HLBC6099FSD2W1EMW-5000K

Issue Date: 11/17/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P626458  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2210273B001)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/17/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: HLBC6099FSD2W1EMW-5000K  
Description: 6IN CANLESS LED DOWNLIGHT WITH SELECTABLE CCT  
Light Source: (1) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

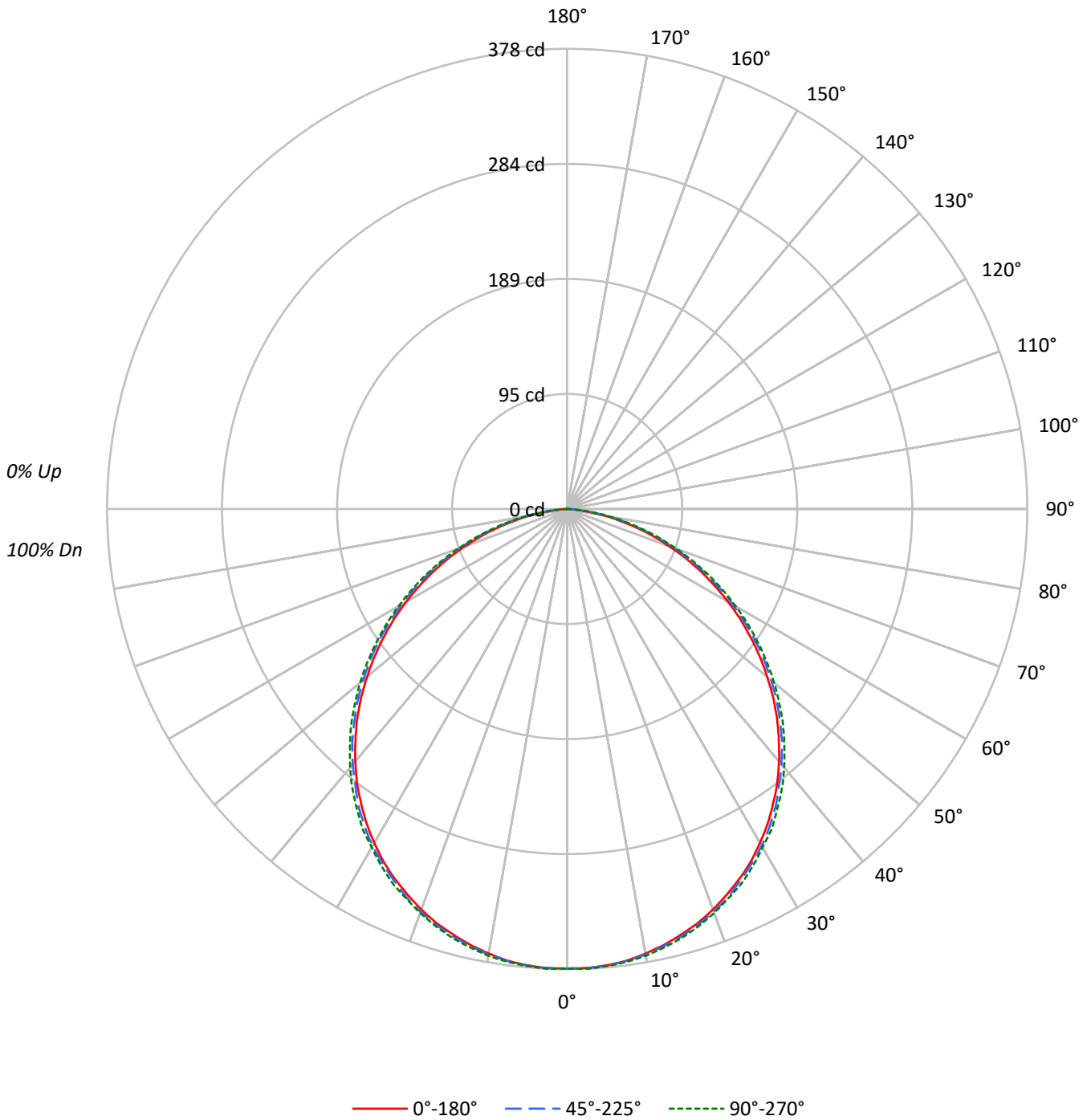
Lumens per Lamp: N/A  
Luminaire Lumens: 1040.0 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.36  
Luminous Opening: Circular (Dia: 0.5m x H: 0m)  
CIE Type: Direct

Input Watts (W): 12.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	31					31			
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27					27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1923	1923	1923
5°	1924	1925	1926
10°	1918	1922	1927
15°	1908	1916	1923
20°	1898	1908	1914
25°	1883	1892	1907
30°	1863	1880	1888
35°	1835	1856	1871
40°	1800	1821	1844
45°	1757	1781	1807
50°	1700	1731	1759
55°	1635	1675	1699
60°	1556	1601	1630
65°	1457	1510	1541
70°	1322	1388	1419
75°	1143	1224	1263
80°	889	974	1035
85°	356	503	643

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1807 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.8	3.4
10°-20°	102.5	9.9
20°-30°	155.3	14.9
30°-40°	186.4	17.9
40°-50°	190.5	18.3
50°-60°	168.1	16.2
60°-70°	123.3	11.9
70°-80°	65.3	6.3
80°-90°	12.9	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
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0°-30°	293.5	28.2
0°-40°	479.9	46.1
0°-60°	838.5	80.6
0°-90°	1040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1040.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	376	376	376	376	377	36
15°	362	362	363	363	365	102
25°	335	336	337	338	339	154
35°	295	297	298	300	301	185
45°	244	246	247	248	251	188
55°	184	187	189	190	191	165
65°	121	123	125	126	128	120
75°	58	60	62	62	64	62
85°	6	7	9	9	11	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	377.5	377.5	377.5	377.5	377.5
2.5°	377.4	376.8	377.5	376.8	378.1
5°	376.3	375.8	376.5	375.9	376.8
7.5°	374.2	373.8	374.5	374.1	375.3
10°	370.8	371.0	371.6	371.1	372.7
12.5°	366.8	367.0	367.7	367.7	368.9
15°	361.9	362.4	363.3	363.4	364.7
17.5°	356.7	357.2	358.1	357.8	359.3
20°	350.2	350.6	352.1	352.5	353.1
22.5°	342.8	344.5	345.2	345.2	346.1
25°	335.1	335.6	336.7	337.9	339.3
27.5°	326.7	327.4	328.3	329.4	330.6
30°	316.8	317.7	319.6	320.1	321.0
32.5°	306.6	308.2	309.5	310.0	312.3
35°	295.1	297.1	298.5	299.6	301.0
37.5°	283.6	285.2	286.0	287.5	289.8
40°	270.8	271.9	273.9	274.6	277.3
42.5°	257.4	259.1	261.2	262.3	264.1
45°	243.9	245.5	247.3	248.5	250.9
47.5°	229.6	231.3	233.5	234.5	236.4
50°	214.6	216.6	218.5	219.6	222.0
52.5°	199.7	201.8	203.9	204.8	206.8
55°	184.1	186.7	188.6	189.9	191.4
57.5°	168.7	170.7	172.8	174.4	176.0
60°	152.8	155.0	157.2	158.4	160.0
62.5°	136.7	139.4	141.3	142.4	144.0
65°	120.9	122.8	125.3	126.2	127.9
67.5°	104.9	107.1	108.9	110.0	111.5
70°	88.8	91.0	93.2	93.5	95.3
72.5°	73.3	75.3	77.5	77.9	79.6
75°	58.1	60.2	62.2	62.5	64.2
77.5°	43.6	45.5	47.3	47.7	49.3
80°	30.3	31.8	33.2	33.8	35.3
82.5°	17.3	18.8	20.3	20.9	22.2
85°	6.1	7.4	8.6	9.3	11.0
87.5°	2.1	2.4	2.7	2.9	3.2
90°	0.1	0.1	0.1	0.2	0.5

(END OF REPORT)