

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: P626455

Luminaire Tested: HLBC6099FSD2W1EMW-3000K

Issue Date: 11/17/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P626455  
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-3000K  
Description: 6IN CANLESS LED DOWNLIGHT WITH SELECTABLE CCT  
Light Source: (1) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

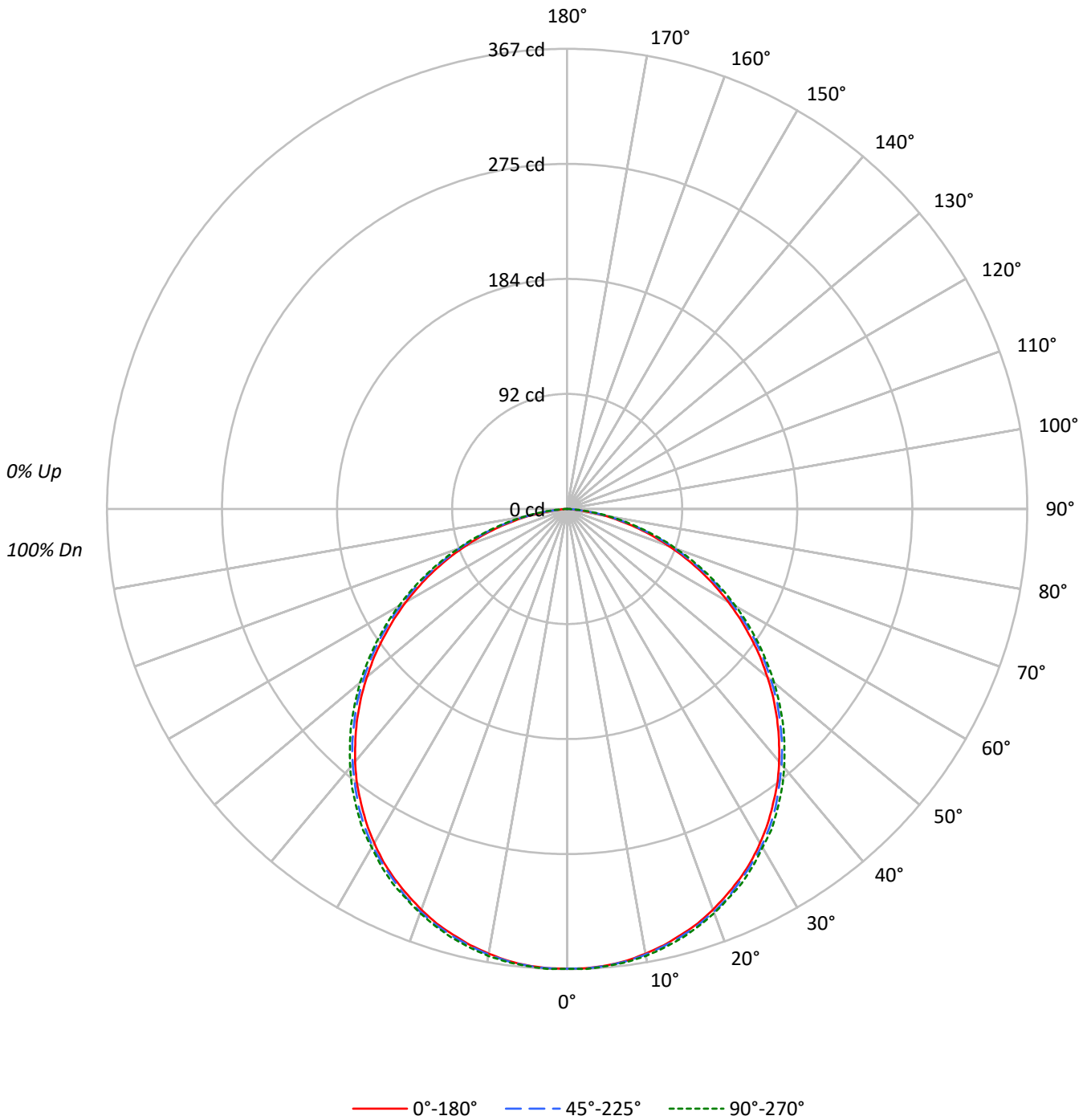
Lumens per Lamp: N/A  
Luminaire Lumens: 1010.0 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.36  
Luminous Opening: Circular (Dia: 0.5m x H: 0m)  
CIE Type: Direct

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

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

	0°	45°	90°
0°	1868	1868	1868
5°	1868	1869	1871
10°	1862	1866	1872
15°	1853	1860	1868
20°	1843	1853	1859
25°	1829	1838	1852
30°	1810	1825	1833
35°	1781	1802	1817
40°	1749	1768	1790
45°	1706	1730	1755
50°	1651	1681	1708
55°	1587	1627	1651
60°	1512	1555	1582
65°	1415	1467	1497
70°	1285	1348	1379
75°	1110	1189	1228
80°	862	944	1003
85°	351	491	625

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1755 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.7	3.4
10°-20°	99.5	9.9
20°-30°	150.8	14.9
30°-40°	181.0	17.9
40°-50°	185.0	18.3
50°-60°	163.2	16.2
60°-70°	119.8	11.9
70°-80°	63.4	6.3
80°-90°	12.6	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
0°-30°	285.0	28.2
0°-40°	466.0	46.1
0°-60°	814.3	80.6
0°-90°	1010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	365	365	366	365	366	35
15°	352	352	353	353	354	99
25°	326	326	327	328	330	150
35°	286	288	290	291	292	179
45°	237	238	240	241	244	182
55°	179	181	183	184	186	160
65°	117	119	122	123	124	116
75°	56	58	60	61	62	60
85°	6	7	8	9	11	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	366.7	366.7	366.7	366.7	366.7
2.5°	366.5	366.0	366.6	366.0	367.2
5°	365.4	365.0	365.6	365.1	365.9
7.5°	363.4	363.0	363.7	363.3	364.4
10°	360.1	360.3	360.9	360.4	362.0
12.5°	356.3	356.4	357.1	357.1	358.3
15°	351.5	351.9	352.8	352.9	354.2
17.5°	346.5	346.9	347.8	347.5	348.9
20°	340.1	340.4	341.9	342.4	343.0
22.5°	332.9	334.6	335.3	335.3	336.1
25°	325.5	326.0	327.0	328.1	329.5
27.5°	317.3	318.0	318.9	319.9	321.0
30°	307.7	308.6	310.4	310.9	311.7
32.5°	297.7	299.3	300.6	301.0	303.3
35°	286.5	288.5	289.9	290.9	292.3
37.5°	275.5	276.9	277.8	279.2	281.4
40°	263.0	264.1	266.0	266.7	269.3
42.5°	250.0	251.7	253.6	254.7	256.5
45°	236.8	238.4	240.2	241.3	243.7
47.5°	223.0	224.6	226.8	227.7	229.6
50°	208.4	210.3	212.2	213.3	215.6
52.5°	194.0	196.0	198.0	198.9	200.8
55°	178.7	181.3	183.2	184.4	185.9
57.5°	163.8	165.7	167.8	169.3	170.9
60°	148.4	150.5	152.7	153.9	155.3
62.5°	132.8	135.3	137.2	138.3	139.9
65°	117.4	119.3	121.7	122.6	124.2
67.5°	101.8	104.0	105.8	106.8	108.3
70°	86.3	88.4	90.5	90.8	92.6
72.5°	71.2	73.1	75.3	75.7	77.3
75°	56.4	58.4	60.4	60.7	62.4
77.5°	42.4	44.2	46.0	46.4	47.8
80°	29.4	30.9	32.2	32.8	34.2
82.5°	16.8	18.3	19.7	20.3	21.6
85°	6.0	7.2	8.4	9.0	10.7
87.5°	2.0	2.3	2.6	2.8	3.1
90°	0.1	0.1	0.1	0.2	0.5

(END OF REPORT)