

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: P626456

Luminaire Tested: HLBC6099FSD2W1EMW-3500K

Issue Date: 11/17/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P626456  
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-3500K  
Description: 6IN CANLESS LED DOWNLIGHT WITH SELECTABLE CCT  
Light Source: (1) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

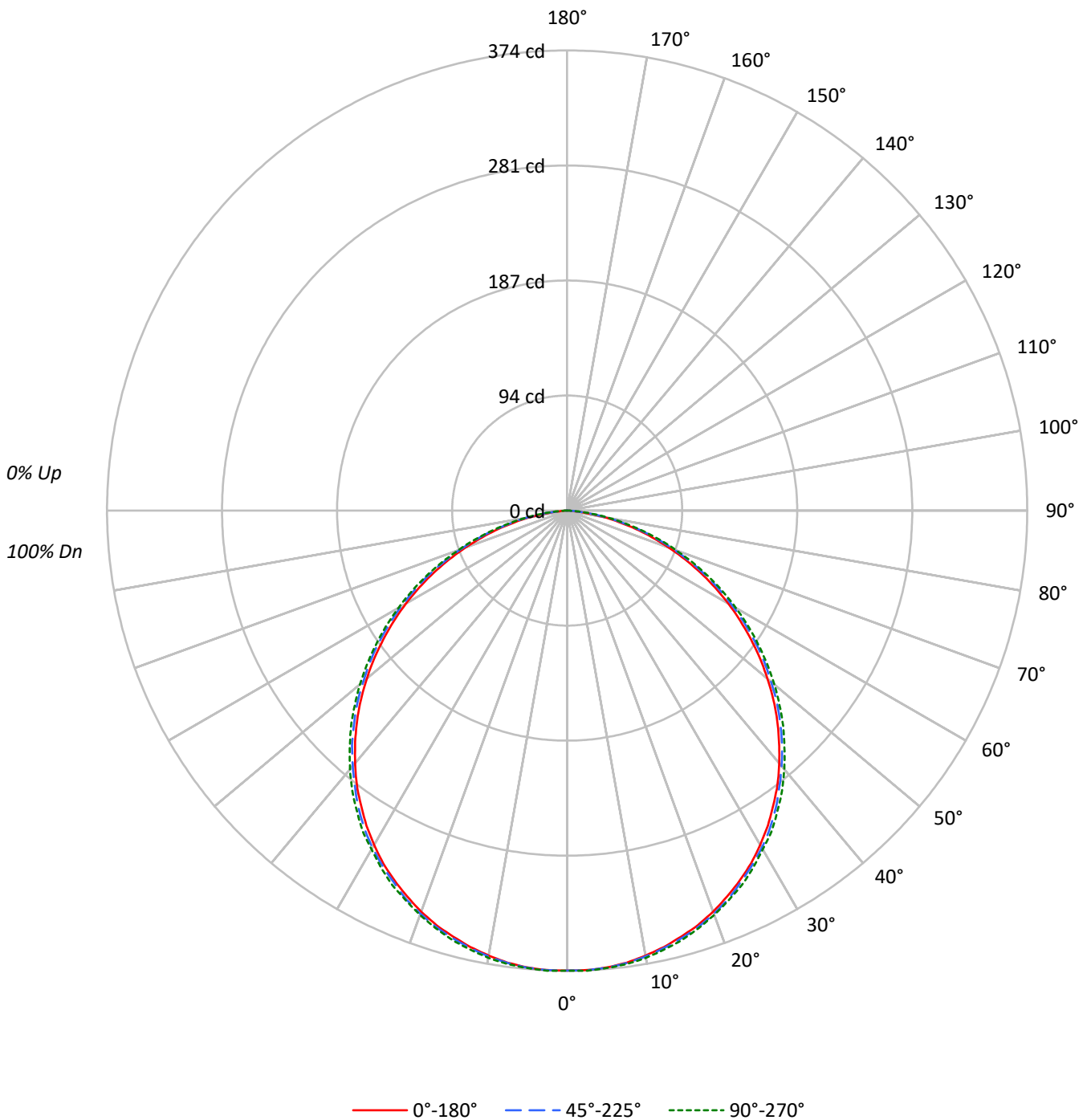
Lumens per Lamp: N/A  
Luminaire Lumens: 1030.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.36  
Luminous Opening: Circular (Dia: 0.5m x H: 0m)  
CIE Type: Direct

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	90	88	87	84					84			
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°	1904	1904	1904
5°	1905	1906	1908
10°	1899	1903	1909
15°	1890	1897	1904
20°	1880	1890	1895
25°	1865	1874	1888
30°	1845	1861	1870
35°	1817	1838	1853
40°	1783	1803	1826
45°	1739	1765	1790
50°	1684	1715	1742
55°	1619	1659	1684
60°	1542	1586	1613
65°	1443	1496	1527
70°	1310	1374	1406
75°	1131	1212	1252
80°	880	965	1024
85°	356	497	637

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1790 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.4	3.4
10°-20°	101.5	9.9
20°-30°	153.8	14.9
30°-40°	184.6	17.9
40°-50°	188.7	18.3
50°-60°	166.4	16.2
60°-70°	122.2	11.9
70°-80°	64.7	6.3
80°-90°	12.8	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°	290.7	28.2
0°-40°	475.2	46.1
0°-60°	830.4	80.6
0°-90°	1030.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1030.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	373	372	373	372	373	35
15°	358	359	360	360	361	101
25°	332	332	334	335	336	153
35°	292	294	296	297	298	183
45°	242	243	245	246	248	186
55°	182	185	187	188	190	163
65°	120	122	124	125	127	118
75°	58	60	62	62	64	61
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°	373.9	373.9	373.9	373.9	373.9
2.5°	373.8	373.2	373.9	373.2	374.4
5°	372.7	372.2	372.9	372.3	373.2
7.5°	370.6	370.2	370.9	370.5	371.7
10°	367.2	367.4	368.0	367.5	369.1
12.5°	363.3	363.5	364.1	364.1	365.4
15°	358.4	358.9	359.8	359.9	361.2
17.5°	353.3	353.7	354.7	354.4	355.8
20°	346.9	347.2	348.7	349.1	349.7
22.5°	339.5	341.2	341.9	341.9	342.8
25°	331.9	332.4	333.5	334.6	336.0
27.5°	323.5	324.3	325.2	326.2	327.4
30°	313.8	314.7	316.5	317.0	317.9
32.5°	303.6	305.2	306.6	307.0	309.3
35°	292.2	294.2	295.6	296.7	298.1
37.5°	280.9	282.4	283.3	284.7	287.0
40°	268.2	269.3	271.2	272.0	274.6
42.5°	255.0	256.6	258.7	259.8	261.5
45°	241.5	243.2	245.0	246.1	248.5
47.5°	227.4	229.1	231.3	232.2	234.2
50°	212.5	214.5	216.4	217.5	219.9
52.5°	197.8	199.9	201.9	202.8	204.8
55°	182.3	184.9	186.8	188.0	189.6
57.5°	167.0	169.0	171.1	172.7	174.3
60°	151.4	153.5	155.7	156.9	158.4
62.5°	135.4	138.0	140.0	141.0	142.7
65°	119.7	121.6	124.1	125.0	126.7
67.5°	103.8	106.0	107.9	108.9	110.5
70°	88.0	90.1	92.3	92.6	94.4
72.5°	72.6	74.6	76.8	77.2	78.8
75°	57.5	59.6	61.6	61.9	63.6
77.5°	43.2	45.1	46.9	47.3	48.8
80°	30.0	31.5	32.9	33.5	34.9
82.5°	17.1	18.7	20.1	20.7	22.0
85°	6.1	7.3	8.5	9.2	10.9
87.5°	2.1	2.4	2.7	2.8	3.2
90°	0.1	0.1	0.1	0.2	0.5

(END OF REPORT)