

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: P626461

Luminaire Tested: HLBC6LS9FSD2W1EMWR-3000K-1200lm

Issue Date: 11/17/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P626461  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2209385B001)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/17/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: HLBC6LS9FSD2W1EMWR-3000K-1200lm  
Description: 6IN CANLESS LED DOWNLIGHT WITH SELECTABLE CCT AND SELECTABLE LUMEN OUTPUT  
Light Source: (1) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

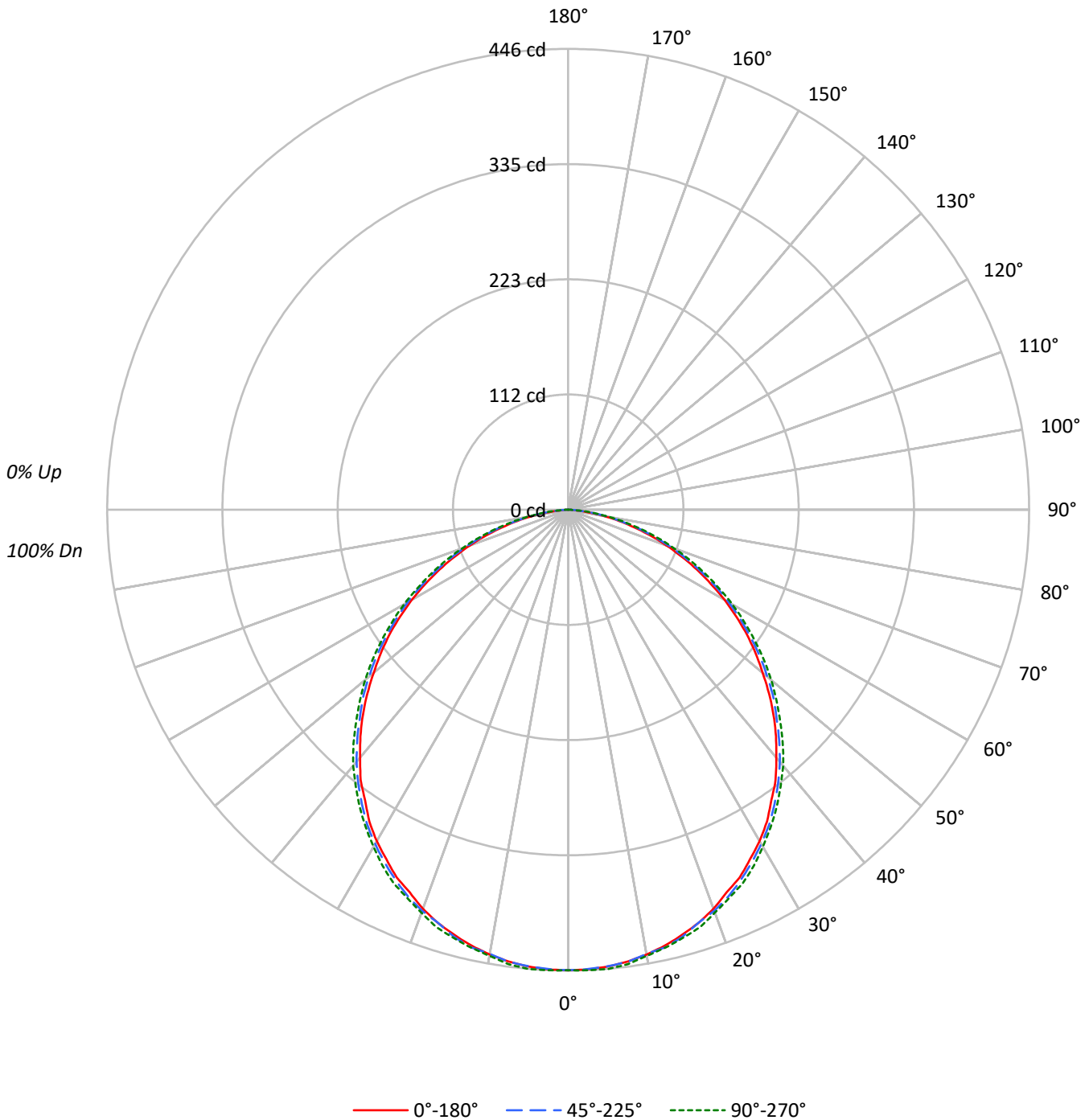
Lumens per Lamp: N/A  
Luminaire Lumens: 1220.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.35  
Luminous Opening: Circular (Dia: 0.5m x H: 0m)  
CIE Type: Direct

Input Watts (W): 15.8  
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	91	89	90	88	86	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	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
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°	2270	2270	2270
5°	2269	2267	2281
10°	2260	2257	2267
15°	2246	2255	2262
20°	2228	2239	2249
25°	2206	2221	2243
30°	2179	2196	2215
35°	2131	2164	2186
40°	2082	2118	2151
45°	2024	2053	2089
50°	1946	1993	2031
55°	1876	1914	1954
60°	1782	1827	1870
65°	1656	1712	1759
70°	1507	1572	1622
75°	1309	1387	1442
80°	1024	1112	1188
85°	456	590	742

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 67.5°  
 Vertical Angle: 45°  
 Luminance: 2153 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.3	3.5
10°-20°	120.9	9.9
20°-30°	182.9	15.0
30°-40°	218.9	17.9
40°-50°	222.3	18.2
50°-60°	195.4	16.0
60°-70°	143.3	11.7
70°-80°	77.2	6.3
80°-90°	16.8	1.4
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°	346.1	28.4
0°-40°	565.0	46.3
0°-60°	982.7	80.5
0°-90°	1220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1220.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	444	442	444	447	446	42
15°	426	426	428	434	429	120
25°	393	393	395	403	399	181
35°	343	346	348	359	352	215
45°	281	283	285	299	290	216
55°	211	214	216	230	220	188
65°	137	140	142	155	146	136
75°	66	69	70	82	73	71
85°	8	9	10	19	13	13
90°	0	0	1	2	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	445.8	445.8	445.8	445.8	445.8
2.5°	445.3	443.8	445.0	447.8	446.2
5°	443.8	442.3	443.5	447.2	446.1
7.5°	441.0	441.2	441.2	446.2	443.5
10°	437.1	437.0	436.5	442.6	438.4
12.5°	432.2	433.3	433.8	437.2	434.1
15°	426.0	425.5	427.7	434.5	429.0
17.5°	419.3	418.7	419.1	428.1	423.7
20°	411.0	411.5	413.1	421.1	415.0
22.5°	400.8	404.0	405.1	412.1	406.8
25°	392.6	393.4	395.3	402.9	399.1
27.5°	381.2	382.8	384.8	393.8	388.8
30°	370.5	372.5	373.5	383.5	376.6
32.5°	357.9	359.8	361.8	371.6	364.5
35°	342.8	346.0	348.0	359.1	351.6
37.5°	329.7	331.8	333.7	345.7	337.5
40°	313.2	316.8	318.5	330.4	323.6
42.5°	297.5	299.1	302.1	315.2	307.4
45°	281.0	282.8	285.0	298.9	290.0
47.5°	263.6	266.3	269.4	282.1	273.5
50°	245.6	248.8	251.6	264.7	256.3
52.5°	228.6	231.7	233.9	247.9	238.7
55°	211.3	213.7	215.6	229.7	220.1
57.5°	192.9	195.6	197.6	211.4	201.9
60°	174.9	176.5	179.4	192.4	183.6
62.5°	155.8	157.9	161.0	174.5	164.3
65°	137.4	139.8	142.1	155.1	146.0
67.5°	119.0	121.7	123.5	136.3	127.5
70°	101.2	103.5	105.6	117.8	108.9
72.5°	83.6	86.0	87.8	99.7	91.1
75°	66.5	68.7	70.5	81.7	73.3
77.5°	50.3	52.2	53.8	64.6	56.4
80°	34.9	36.7	37.9	48.2	40.5
82.5°	20.6	22.3	23.4	32.9	25.5
85°	7.8	9.0	10.1	18.7	12.7
87.5°	2.7	3.1	3.3	6.2	3.9
90°	0.1	0.1	0.6	2.2	0.5

(END OF REPORT)