

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 COMMERCIAL

Report Number: P838275

Luminaire Tested: HCSQ605D010-HM60525927-61SQH

Issue Date: 5/21/2024



**Test Information**

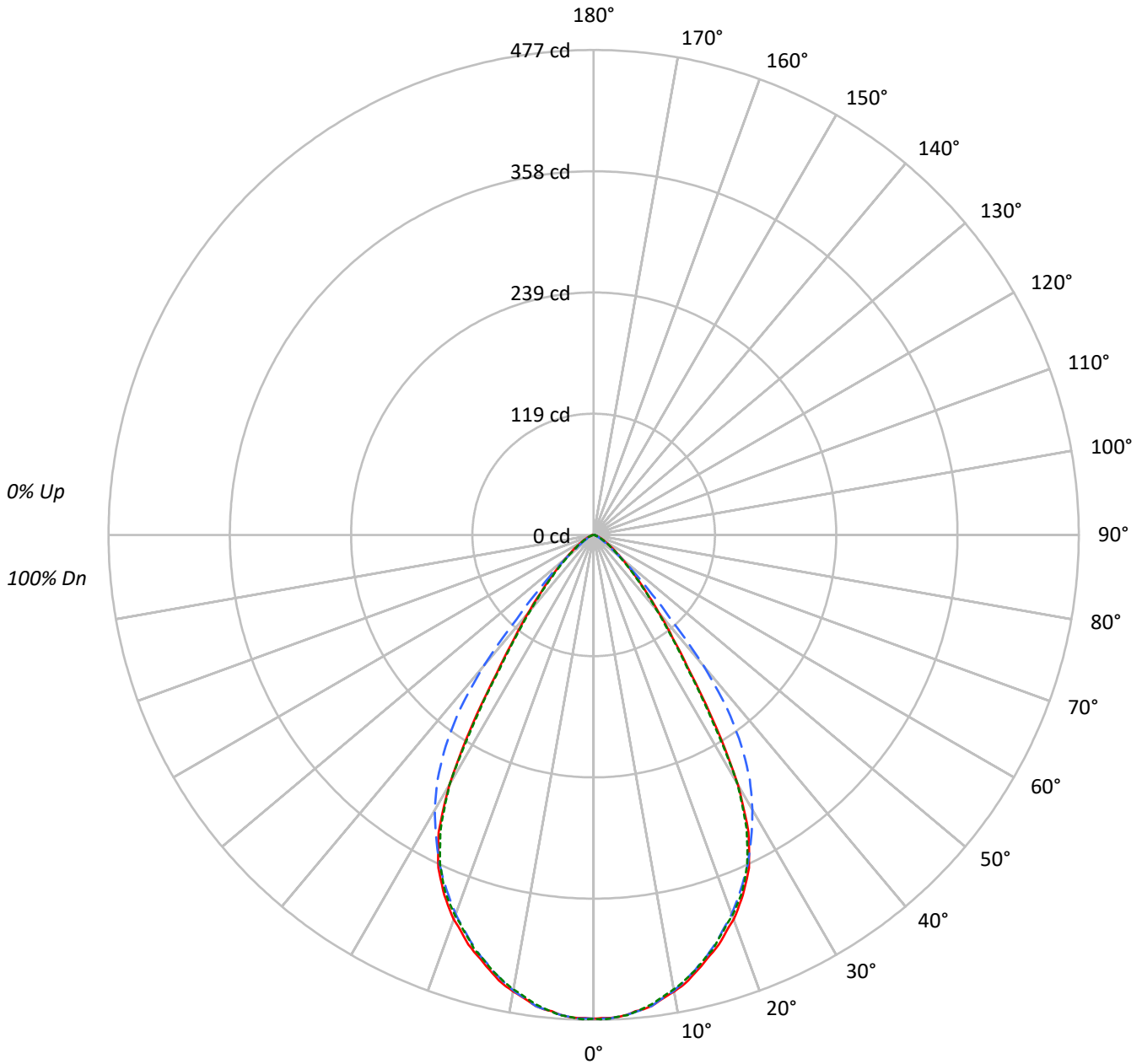
Test Method: LM-79-2019  
Report Number: P838275  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ605D010-HM60525927-61SQH  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 535.2 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.01 / 1.04  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 24 FT

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### Luminous Intensity Polar Plot





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

RF	20					20					20					20				
RC	80					70					50					30				
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92		
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	91	88	86	85		
3	101	94	88	84	99	92	87	83	90	85	82	87	84	81	85	82	79	78		
4	95	87	81	76	93	86	80	76	83	78	75	81	77	74	79	76	73	71		
5	90	80	74	69	88	79	74	69	78	72	68	76	71	68	74	70	67	66		
6	85	75	68	64	83	74	68	63	72	67	63	71	66	63	70	65	62	61		
7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	65	61	58	56		
8	76	65	59	54	74	65	59	54	64	58	54	63	57	54	62	57	54	52		
9	72	61	55	51	70	61	55	50	60	54	50	59	54	50	58	53	50	48		
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	55	50	47	45		

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

	0°	45°	90°
0°	20486	20486	20486
5°	20326	20361	20348
10°	19936	19893	19844
15°	19234	19127	19118
20°	18442	18176	18259
25°	17164	17012	16974
30°	14105	15521	14065
35°	8709	13330	8504
40°	5592	9448	5401
45°	3647	4579	3471
50°	2425	2277	2264
55°	1644	1186	1524
60°	1111	723	1025
65°	784	540	703
70°	504	403	466
75°	349	299	299
80°	273	198	198
85°	148	247	148

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4579 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	8.3
10°-20°	120.6	22.5
20°-30°	162.8	30.4
30°-40°	127.1	23.7
40°-50°	53.2	9.9
50°-60°	18.0	3.4
60°-70°	6.4	1.2
70°-80°	2.1	0.4
80°-90°	0.4	0.1
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°	327.9	61.3
0°-40°	454.9	85.0
0°-60°	526.2	98.3
0°-90°	535.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	535.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	470	471	471	470	471	44
15°	432	430	429	429	429	121
25°	361	360	358	358	357	163
35°	166	194	254	194	162	109
45°	60	64	75	61	57	48
55°	22	20	16	19	20	20
65°	8	6	5	6	7	8
75°	2	2	2	2	2	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	475.8	475.8	475.8	475.8	475.8
1°	475.3	476.1	475.6	475.8	476.6
2°	475.3	475.3	475.8	475.6	475.8
3°	474.8	474.8	474.3	474.3	474.3
4°	473.2	473.2	473.2	472.7	473.7
5°	470.3	470.8	471.1	470.3	470.8
6°	469.2	469.5	469.0	468.7	468.2
7°	466.9	466.1	466.9	465.0	465.3
8°	462.9	462.9	462.4	461.9	461.3
9°	459.2	459.2	458.7	457.9	457.4
10°	456.0	455.3	455.0	454.2	453.9
11°	452.3	450.8	450.5	449.7	449.7
12°	447.9	447.1	445.2	445.0	445.0
13°	442.3	441.5	440.2	439.2	440.2
14°	437.0	436.5	434.1	434.9	434.7
15°	431.5	430.4	429.1	428.6	428.9
16°	426.5	424.6	422.8	423.1	424.6
17°	421.2	418.6	416.7	416.5	417.2
18°	414.6	412.5	409.6	410.7	410.7
19°	408.0	405.1	403.3	403.0	404.1
20°	402.5	398.0	396.7	396.4	398.5
22.5°	383.5	379.0	377.9	379.0	381.1
25°	361.3	359.7	358.1	358.1	357.3
27.5°	329.9	333.6	335.4	331.7	325.7
30°	283.7	299.3	312.2	297.4	282.9
32.5°	223.5	255.7	285.6	254.9	218.3
35°	165.7	194.5	253.6	194.2	161.8
37.5°	127.7	146.2	215.6	143.8	124.0
40°	99.5	110.3	168.1	109.0	96.1
42.5°	77.3	84.2	111.9	82.6	74.7
45°	59.9	64.1	75.2	61.2	57.0
47.5°	46.7	48.6	51.5	46.4	44.1
50°	36.2	36.2	34.0	34.8	33.8
52.5°	28.0	26.9	23.0	25.3	25.9
55°	21.9	20.1	15.8	19.0	20.3
57.5°	16.6	14.8	11.3	14.0	15.3
60°	12.9	11.1	8.4	10.6	11.9
62.5°	10.0	8.4	6.6	7.9	9.0
65°	7.7	6.3	5.3	6.1	6.9
67.5°	5.8	4.8	4.0	4.5	5.3
70°	4.0	3.7	3.2	3.4	3.7
72.5°	2.9	2.6	2.4	2.4	2.6
75°	2.1	1.8	1.8	1.8	1.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	0.5	0.5	0.5	0.5	0.5
85°	0.3	0.3	0.5	0.3	0.3
87.5°	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





— 0°-180°    - - 45°-225°    - - - - 90°-270°

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Scaled Data Report



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Scaled Data Report





77.5°	1.3	1.3	1.3	1.3	1.3
80°	1.1	1.1	0.8	0.8	0.8

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Scaled Data Report



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