

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: P838288

Luminaire Tested: HCSQ605D010-HM60525935-61SQMW

Issue Date: 5/21/2024

**Test Information**

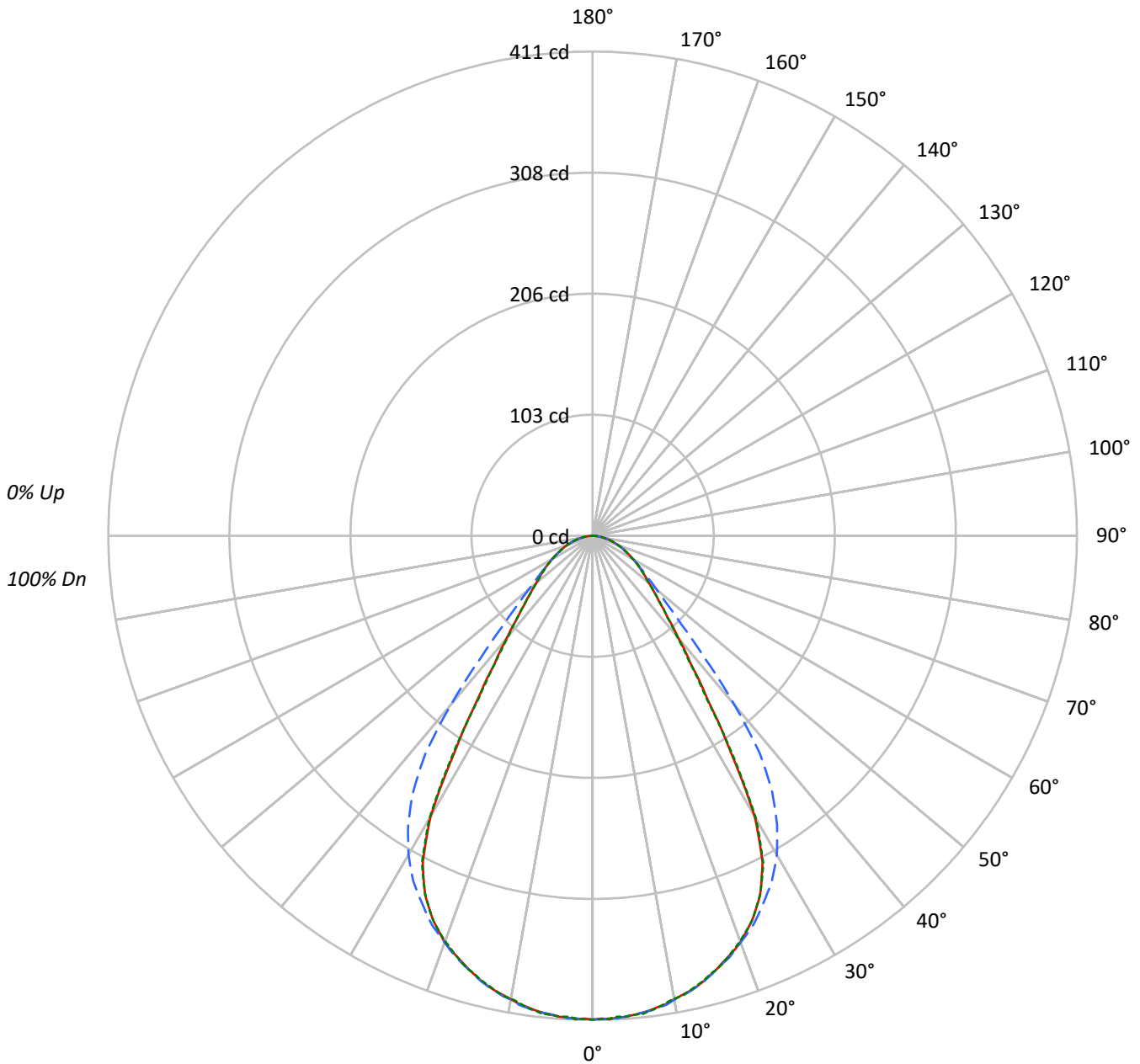
Test Method: LM-79-2019  
Report Number: P838288  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCSQ605D010-HM60525935-61SQMW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 605.8 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11  
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					10					0
RW	70	50	30	10	70	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								
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89								
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79								
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71								
4	91	81	74	69	89	80	73	68	77	72	67	75	70	67	73	69	66	64								
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53								
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48								
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44								
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41								
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38								

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

	0°	45°	90°
0°	17683	17683	17683
5°	17638	17625	17638
10°	17466	17479	17440
15°	17206	17219	17179
20°	16820	16829	16779
25°	15981	16319	15967
30°	13682	15536	13766
35°	8988	13971	8857
40°	6357	10533	6244
45°	4926	6485	4963
50°	4193	4729	4153
55°	3768	3881	3768
60°	3410	3410	3410
65°	3128	3097	3097
70°	2858	2858	2895
75°	2678	2578	2628
80°	2356	2356	2356
85°	1976	1976	1976

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 6485 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	6.4
10°-20°	108.7	17.9
20°-30°	154.9	25.6
30°-40°	132.1	21.8
40°-50°	73.1	12.1
50°-60°	46.0	7.6
60°-70°	30.6	5.0
70°-80°	16.8	2.8
80°-90°	4.8	0.8
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°	302.4	49.9
0°-40°	434.5	71.7
0°-60°	553.6	91.4
0°-90°	605.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	605.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	408	409	408	407	408	39
15°	386	386	386	386	385	109
25°	336	340	344	340	336	152
35°	171	202	266	202	168	111
45°	81	89	106	88	82	64
55°	50	51	52	51	50	45
65°	31	31	30	31	30	31
75°	16	16	16	16	16	17
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	410.7	410.7	410.7	410.7	410.7
1°	409.8	410.4	410.4	410.1	410.4
2°	410.7	409.8	409.8	409.8	410.1
3°	409.5	410.1	410.1	409.2	408.7
4°	409.2	409.0	409.0	409.8	409.2
5°	408.1	408.7	407.8	407.2	408.1
6°	407.0	407.2	407.0	407.2	408.1
7°	405.5	406.4	406.1	405.8	405.8
8°	403.8	404.9	404.4	404.4	404.1
9°	402.1	402.4	402.9	402.9	401.2
10°	399.5	400.4	399.8	400.1	398.9
11°	397.2	398.3	398.1	397.5	397.8
12°	395.2	395.8	395.5	394.6	394.9
13°	392.6	393.2	392.9	392.9	392.0
14°	389.7	389.2	390.0	389.4	389.2
15°	386.0	386.0	386.3	386.0	385.4
16°	382.6	382.8	382.8	382.6	382.8
17°	378.5	379.7	379.4	378.8	379.1
18°	374.8	375.7	376.0	375.7	374.8
19°	371.4	371.9	371.7	370.5	370.5
20°	367.1	367.3	367.3	366.8	366.2
22.5°	353.6	355.6	357.0	355.9	353.6
25°	336.4	340.4	343.5	340.1	336.1
27.5°	312.2	320.3	329.8	321.1	313.7
30°	275.2	293.6	312.5	295.3	276.9
32.5°	219.0	255.1	291.3	258.6	222.4
35°	171.0	201.8	265.8	202.0	168.5
37.5°	136.6	158.4	233.0	157.0	135.2
40°	113.1	127.7	187.4	127.1	111.1
42.5°	94.4	105.6	140.3	104.5	94.4
45°	80.9	88.7	106.5	88.1	81.5
47.5°	70.9	75.8	85.2	75.5	70.9
50°	62.6	65.4	70.6	65.1	62.0
52.5°	56.0	57.7	59.7	57.1	55.4
55°	50.2	51.1	51.7	50.8	50.2
57.5°	44.8	45.3	45.1	44.8	44.5
60°	39.6	39.9	39.6	39.9	39.6
62.5°	35.0	35.3	34.7	35.0	34.7
65°	30.7	31.0	30.4	30.7	30.4
67.5°	26.7	26.7	26.7	26.7	26.4
70°	22.7	23.0	22.7	23.0	23.0
72.5°	19.2	19.2	18.9	19.2	19.2
75°	16.1	15.8	15.5	15.8	15.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
82.5°	6.9	6.9	6.6	6.9	6.9
85°	4.0	4.0	4.0	4.3	4.0
87.5°	2.0	1.7	1.7	2.0	2.0
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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77.5°	12.6	12.6	12.3	12.6	12.6
80°	9.5	9.8	9.5	9.8	9.5

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Scaled Data Report



(END OF REPORT)