

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



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: P838564

Luminaire Tested: HCSQ635D010-HM63040935-61SQC

Issue Date: 5/21/2024



Test Information

Test Method: LM-79-2019
Report Number: P838564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ635D010-HM63040935-61SQC
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

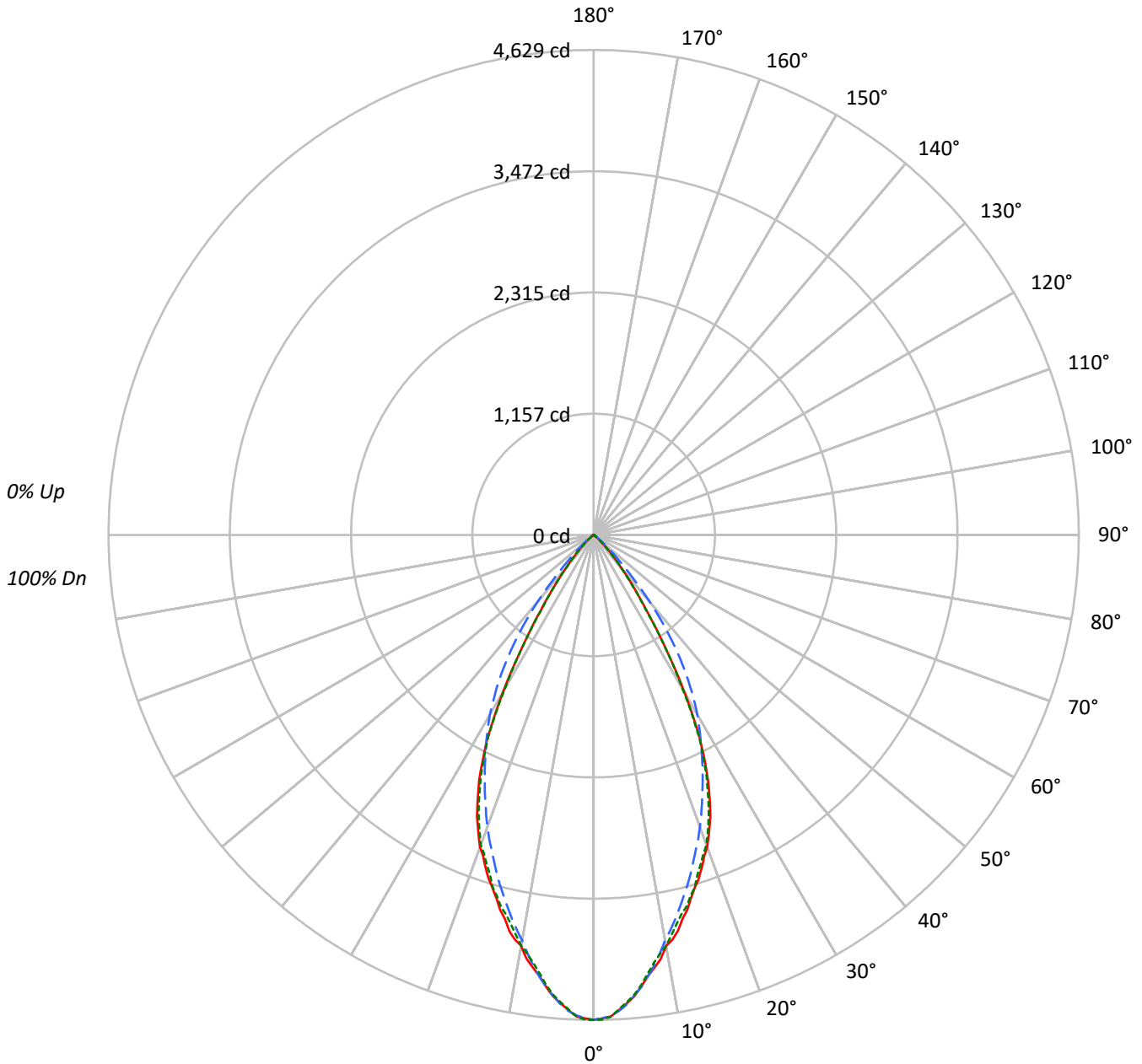
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3467.2 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.81 / 0.85
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 34
Input Voltage (V): NR
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: 24 FT

TEST NUMBER: P838564
CATALOG NUMBER: HCSQ635D010-HM63040935-61SQC

Luminous Intensity Polar Plot





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CATALOG NUMBER: HCSQ635D010-HM63040935-61SQC

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	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	100	100	100	100		
	1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94	94	94	94	94	94		
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87		
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81	81	81	81	81	81		
	4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	78	76	76	76	76	76	76		
	5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71	71	71	71	71	71		
	6	88	80	74	70	87	79	73	69	77	72	69	76	72	68	75	71	68	66	66	66	66	66	66		
	7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62	62	62	62	62	62		
	8	80	71	65	61	79	70	65	61	69	64	60	68	64	60	67	63	60	59	59	59	59	59	59		
	9	76	67	61	57	75	66	61	57	65	60	57	65	60	57	64	60	56	55	55	55	55	55	55		
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52	52	52	52	52	52		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	199309	199309	199309
5°	191184	190847	190579
10°	174127	171762	173992
15°	160027	154170	159060
20°	145223	135876	144233
25°	122738	116786	121047
30°	85940	98314	84478
35°	46159	75415	45266
40°	22853	46667	22679
45°	9980	19674	9791
50°	3208	7147	3208
55°	1621	2320	1509
60°	1068	1068	1068
65°	784	784	784
70°	579	579	579
75°	516	516	516
80°	372	372	372
85°	741	741	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 19674 cd/sqm



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CATALOG NUMBER: HCSQ635D010-HM63040935-61SQC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.5	11.7
10°-20°	981.6	28.3
20°-30°	1133.9	32.7
30°-40°	708.1	20.4
40°-50°	196.7	5.7
50°-60°	27.5	0.8
60°-70°	8.1	0.2
70°-80°	3.5	0.1
80°-90°	1.4	0.0
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°	2521.9	72.7
0°-40°	3230.0	93.2
0°-60°	3454.3	99.6
0°-90°	3467.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3467.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4629	4629	4629	4629	4629	
5°	4424	4411	4416	4410	4410	408
15°	3590	3522	3459	3513	3568	1006
25°	2584	2508	2458	2506	2548	1154
35°	878	1084	1435	1072	861	584
45°	164	209	323	207	161	142
55°	22	22	31	22	20	21
65°	8	8	8	8	8	8
75°	3	3	3	3	3	3
85°	2	2	2	2	2	1
90°	0	0	0	0	0	

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CATALOG NUMBER: HCSQ635D010-HM63040935-61SQC

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4629.1	4629.1	4629.1	4629.1	4629.1
1°	4615.2	4615.2	4615.2	4627.5	4627.5
2°	4601.3	4598.2	4590.4	4599.7	4604.3
3°	4544.0	4550.2	4553.3	4548.7	4537.9
4°	4485.3	4479.1	4496.1	4485.3	4476.0
5°	4423.5	4411.1	4415.7	4409.5	4409.5
6°	4336.9	4352.3	4340.0	4329.1	4323.0
7°	4242.6	4254.9	4247.2	4231.7	4220.9
8°	4168.3	4160.6	4148.2	4145.2	4126.6
9°	4097.2	4069.4	4041.6	4046.2	4050.8
10°	3982.8	3985.9	3928.7	3972.0	3979.7
11°	3934.9	3917.9	3842.1	3877.7	3890.0
12°	3865.3	3811.2	3746.3	3775.6	3798.8
13°	3764.8	3709.1	3650.4	3695.2	3718.4
14°	3689.0	3625.7	3551.4	3608.6	3656.6
15°	3590.1	3522.1	3458.7	3512.8	3568.4
16°	3503.5	3424.7	3361.3	3413.8	3497.3
17°	3427.7	3330.3	3253.0	3308.7	3389.1
18°	3339.6	3226.8	3155.6	3214.4	3305.6
19°	3242.2	3127.8	3064.4	3112.3	3217.5
20°	3169.5	3041.2	2965.5	3011.8	3147.9
22.5°	2909.8	2775.3	2705.7	2761.4	2869.6
25°	2583.6	2507.8	2458.3	2506.3	2548.0
27.5°	2197.0	2197.0	2214.0	2193.9	2181.6
30°	1728.6	1853.8	1977.5	1847.6	1699.2
32.5°	1261.6	1462.6	1711.6	1488.9	1260.1
35°	878.2	1083.8	1434.8	1071.5	861.2
37.5°	610.7	746.8	1131.8	754.5	603.0
40°	406.6	500.9	830.3	510.2	403.5
42.5°	265.9	330.9	536.5	332.4	259.7
45°	163.9	208.7	323.1	207.2	160.8
47.5°	95.9	123.7	188.6	125.2	94.3
50°	47.9	72.7	106.7	71.1	47.9
52.5°	27.8	38.7	58.8	37.1	27.8
55°	21.6	21.6	30.9	21.6	20.1
57.5°	17.0	17.0	17.0	17.0	15.5
60°	12.4	13.9	12.4	12.4	12.4
62.5°	10.8	10.8	9.3	10.8	9.3
65°	7.7	7.7	7.7	7.7	7.7
67.5°	6.2	6.2	6.2	6.2	6.2
70°	4.6	4.6	4.6	4.6	4.6
72.5°	3.1	4.6	3.1	4.6	4.6
75°	3.1	3.1	3.1	3.1	3.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
82.5°	1.5	1.5	1.5	1.5	1.5
85°	1.5	1.5	1.5	1.5	1.5
87.5°	1.5	1.5	1.5	1.5	1.5
90°	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270°

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77.5°	3.1	3.1	3.1	3.1	1.5
80°	1.5	1.5	1.5	1.5	1.5

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(END OF REPORT)