

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P645294

Luminaire Tested: **RLNL56109FSD2W1EWH-5000K**

Issue Date: 02/28/2023

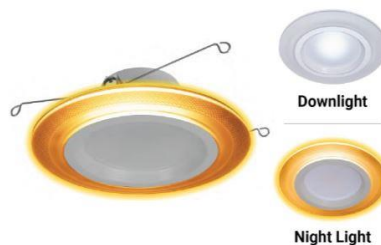
Test Information

Test Method: LM-79-08
Report Number: P645294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ETA23010002P-002)
Test Lab: ETA Testing Technology
Issue Date: 02/28/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: RLNL56109FSD2W1EWH-5000K
Description: 6" 90 CRI COLOR TUNING RECESSED DOWNLIGHT RETROFIT DIM TO WARM
FIXTURE w/ NIGHTLIGHT
Light Source: 90 CRI 5000K LEDS
Ballast/Driver: ELECTRICAL DRIVER

Summary

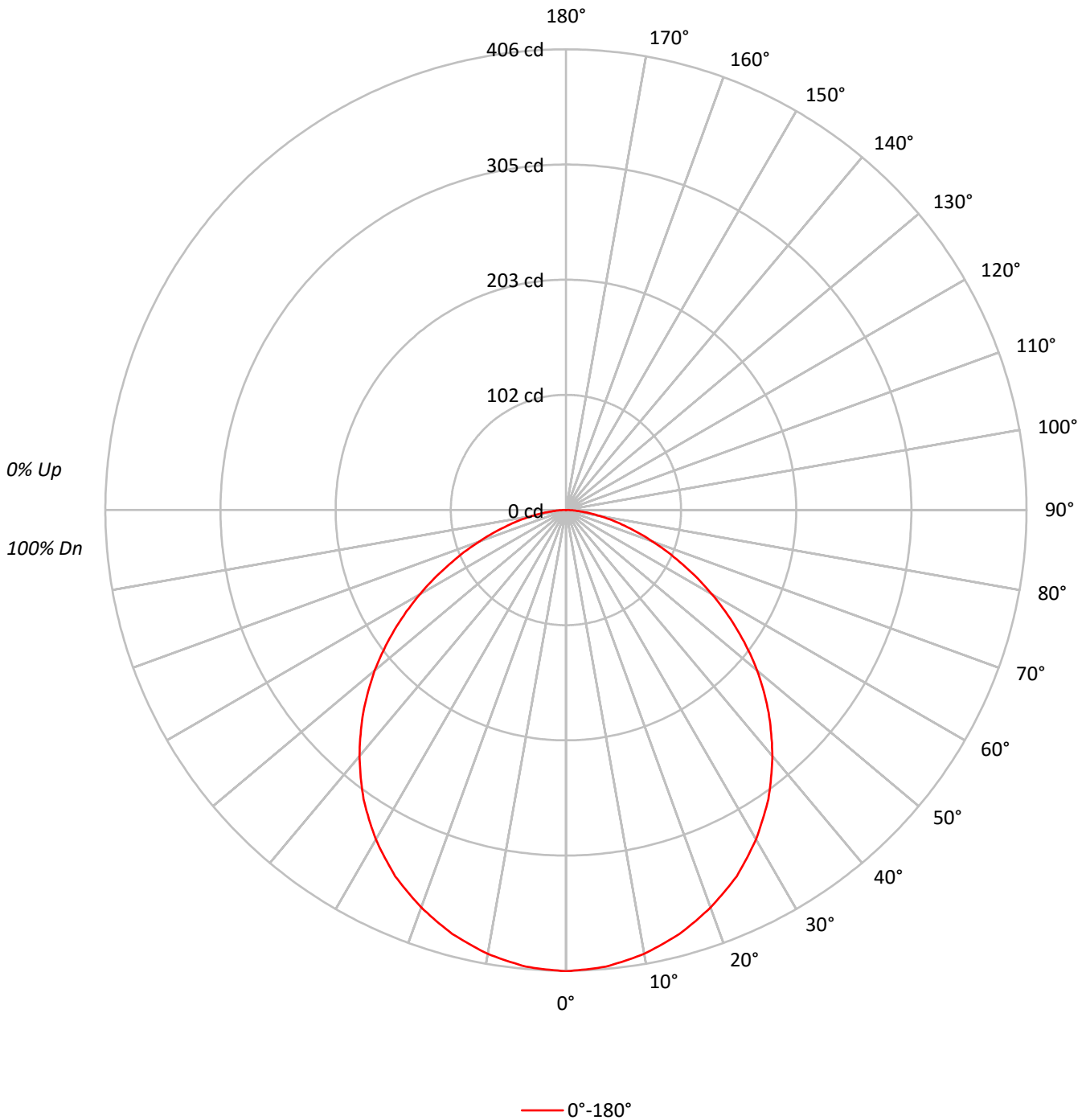
Lumens per Lamp: N/A
Luminaire Lumens: 1050.5 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.33
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.9
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	22284
5°	22232
10°	22110
15°	21952
20°	21749
25°	21540
30°	21212
35°	20813
40°	20259
45°	19591
50°	18771
55°	17662
60°	16314
65°	14697
70°	13031
75°	11332
80°	9471
85°	6982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	3.7
10°-20°	109.1	10.4
20°-30°	163.9	15.6
30°-40°	194.3	18.5
40°-50°	194.7	18.5
50°-60°	165.1	15.7
60°-70°	113.0	10.8
70°-80°	57.6	5.5
80°-90°	14.4	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°	311.4	29.6
0°-40°	505.6	48.1
0°-60°	865.5	82.4
0°-90°	1050.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1050.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	406	
5°	404	38
15°	387	109
25°	356	164
35°	311	194
45°	253	195
55°	185	165
65°	113	113
75°	54	58
85°	11	14
90°	1	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	406.5
5°	404.0
10°	397.2
15°	386.8
20°	372.8
25°	356.1
30°	335.1
35°	311.0
40°	283.1
45°	252.7
50°	220.1
55°	184.8
60°	148.8
65°	113.3
70°	81.3
75°	53.5
80°	30.0
85°	11.1
90°	0.6

(END OF REPORT)