

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: P236649

Luminaire Tested: **L81111SP9040MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-557-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L81111SP9040MB  
Description: HALO, TRACK-MINI, 15D BEAM  
Light Source: (1) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

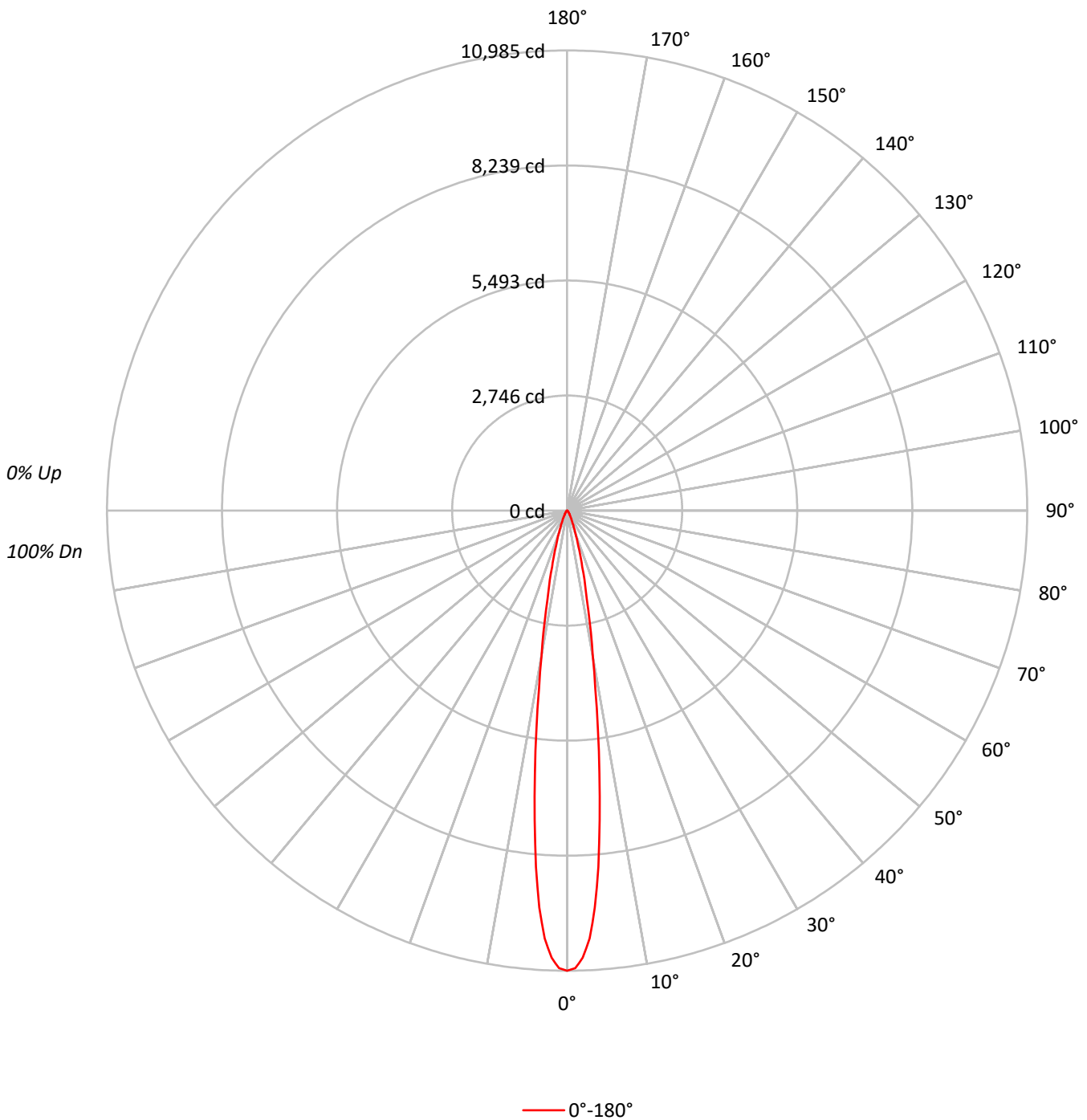
Lumens per Lamp: N/A  
Luminaire Lumens: 1288.8 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Spacing Criteria (0/90/45): 0.27 / 0.27 / 0.28  
Luminous Opening: Circular (Dia: 0.19' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.5  
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: 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	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97
2	112	108	105	103	110	106	104	102	103	101	99	100	99	97	98	96	95	94
3	108	104	100	98	106	102	99	97	100	97	95	98	96	94	96	94	92	91
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86
6	100	94	90	87	99	93	90	87	92	89	86	91	88	86	90	87	85	84
7	97	91	87	85	96	91	87	85	90	86	84	89	86	84	88	85	83	82
8	95	89	85	83	94	89	85	82	88	84	82	87	84	82	86	83	82	81
9	93	87	83	81	92	87	83	81	86	83	80	85	82	80	84	82	80	79
10	91	85	81	79	90	85	81	79	84	81	79	83	80	78	83	80	78	77

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

	0°
0°	4282308
5°	3340672
10°	1386886
15°	561103
20°	240572
25°	115318
30°	64460
35°	37548
40°	22849
45°	16043
50°	12493
55°	9923
60°	7563
65°	6734
70°	5585
75°	5422
80°	2694
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	635.3	49.3
10°-20°	420.3	32.6
20°-30°	134.2	10.4
30°-40°	51.7	4.0
40°-50°	23.2	1.8
50°-60°	13.1	1.0
60°-70°	7.2	0.6
70°-80°	3.7	0.3
80°-90°	0.2	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°	1189.7	92.3
0°-40°	1241.4	96.3
0°-60°	1277.8	99.1
0°-90°	1288.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1288.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10985	
5°	8537	635
15°	1390	420
25°	268	134
35°	79	52
45°	29	23
55°	15	13
65°	7	7
75°	4	4
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	10985.0
1°	10926.8
2°	10678.1
3°	10228.0
4°	9496.5
5°	8536.9
6°	7428.1
7°	6314.4
8°	5259.0
9°	4304.2
10°	3503.6
12.5°	2170.3
15°	1390.3
17.5°	894.1
20°	579.9
22.5°	385.8
25°	268.1
27.5°	192.9
30°	143.2
32.5°	105.5
35°	78.9
37.5°	58.2
40°	44.9
42.5°	35.2
45°	29.1
47.5°	24.3
50°	20.6
52.5°	17.0
55°	14.6
57.5°	12.1
60°	9.7
62.5°	8.5
65°	7.3
67.5°	6.1
70°	4.9
72.5°	4.9
75°	3.6
77.5°	2.4
80°	1.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)