

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 COMMERCIAL

Report Number: P21680

Luminaire Tested: **PD8V120-80V1GC\_16PAR38LED**

Issue Date: 03/03/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P21680  
Test Lab: INNOVATION CENTER P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD8V120-80V1GC\_16PAR38LED  
Description: HALO 8 INCH RECESSED LED LENSED DOWNLIGHT FIXTURE IN "A"  
POSITION , VERTICAL LAMP, SPECULAR CLEAR TRIM AND PRISMATIC  
GLASS LENS. ---ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION  
FACTORS CREATED USING A 500 WATT, NIST TRACEABLE,  
OMNI-DIRECTIONAL-LAB LUMEN STANDARD IN THE GONIOPHOTOMETER  
WITH TEST DISTANCE OF 28.75 FEET----  
Light Source: (1) PAR 38 LED 16 WATTS  
16E26PAR38  
Ballast/Driver: CHROMA IN0061  
CHROMA IN0061

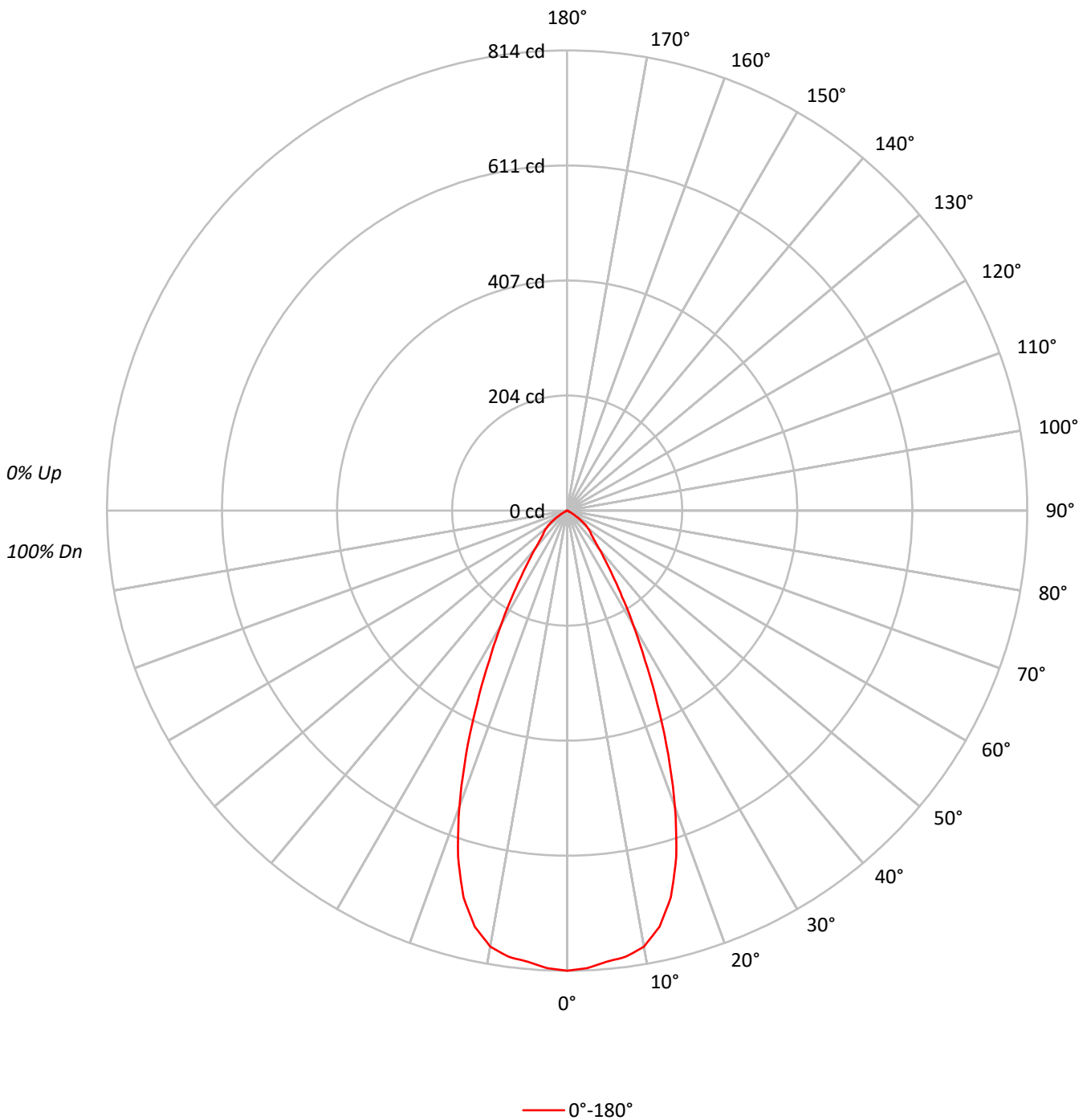
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 612.6 lumens  
Efficiency: N/A  
Efficacy: 41.1 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.74  
Luminous Opening: Vertical Cylinder (Dia: 0.69' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 14.9  
Input Voltage (V): NR  
Input Current (Ain): 0.144  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 3 HR  
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	113	111	108	106	111	109	106	104	105	103	101		101	99	98		97	96	95	93
2	108	103	99	95	106	101	98	94	98	95	92		95	93	90		92	90	88	87
3	102	96	91	87	100	95	90	86	92	88	85		89	86	84		87	85	82	81
4	97	90	84	80	95	89	83	79	86	82	78		84	81	78		83	79	77	75
5	92	84	78	74	91	83	78	74	81	77	73		80	76	72		78	75	72	70
6	88	79	73	69	86	78	73	69	77	72	68		75	71	68		74	70	67	66
7	84	74	68	64	82	74	68	64	72	67	64		71	67	63		70	66	63	62
8	80	70	64	60	79	70	64	60	69	64	60		68	63	60		67	63	59	58
9	76	67	61	57	75	66	61	57	65	60	57		64	60	56		63	59	56	55
10	73	63	58	54	72	63	57	54	62	57	53		61	57	53		60	56	53	52

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

	0°
0°	23603
5°	22943
10°	22325
15°	20248
20°	16131
25°	11103
30°	7078
35°	4387
40°	2850
45°	2111
50°	1774
55°	1159
60°	439
65°	147
70°	56
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	12.4
10°-20°	193.4	31.6
20°-30°	173.5	28.3
30°-40°	91.1	14.9
40°-50°	48.9	8.0
50°-60°	25.4	4.2
60°-70°	3.8	0.6
70°-80°	0.4	0.1
80°-90°	0.0	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°	442.9	72.3
0°-40°	534.1	87.2
0°-60°	608.4	99.3
0°-90°	612.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	814	
5°	801	76
15°	708	193
25°	377	174
35°	140	91
45°	61	49
55°	29	25
65°	3	4
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	814
2.5°	810
5°	801
7.5°	796
10°	783
12.5°	754
15°	708
17.5°	642
20°	558
22.5°	467
25°	377
27.5°	298
30°	234
32.5°	181
35°	140
37.5°	110
40°	87
42.5°	71
45°	61
47.5°	55
50°	48
52.5°	40
55°	29
57.5°	17
60°	10
62.5°	5
65°	3
67.5°	2
70°	1
72.5°	1
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)