

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P130250

Luminaire Tested: **HL612ICAT - HLM6927 - HL6WFL - 456W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130250  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33489)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL612ICAT - HLM6927 - HL6WFL - 456W  
Description: HALO ALLSLOPE 6" 21W, White Coilex Baffle, White Metal Trim Ring using 55 Degree Optic at a 6-12 Pitch  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1442.6 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 0.79 / 1.17  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

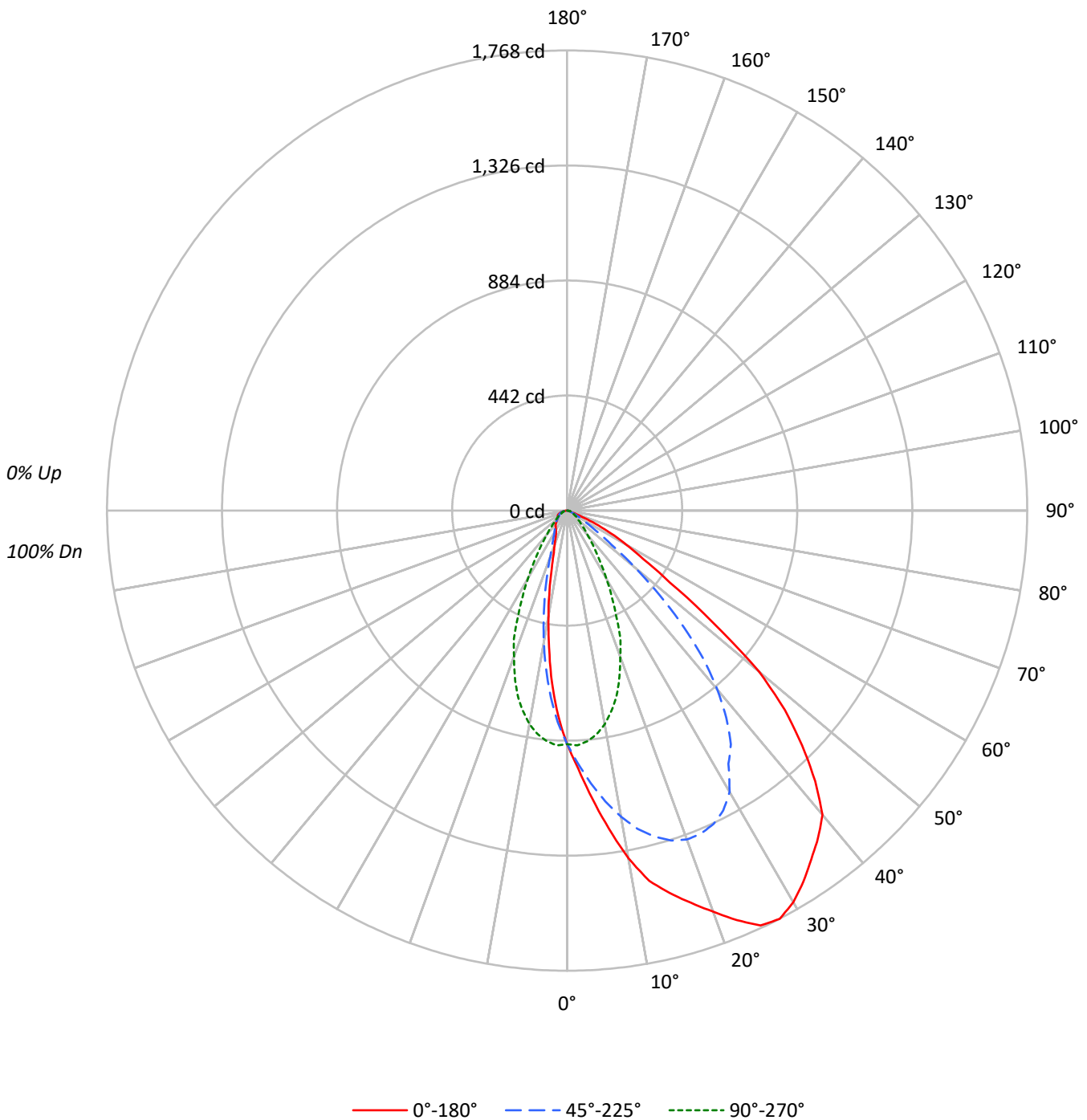
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	78	72	67	75	70	67	73	69	66	64					64			
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52					52			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38	36					36			

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

	0°	90°	180°
0°	53566	53566	53566
5°	65104	52110	39028
10°	78528	48212	23953
15°	87751	42401	13107
20°	94983	34596	8149
25°	103066	26095	5954
30°	103840	17981	5127
35°	100475	11784	4712
40°	97248	7767	4364
45°	85141	5469	3815
50°	67806	4084	3449
55°	36316	3289	3123
60°	21526	2583	3442
65°	10761	2096	3383
70°	2199	1896	3107
75°	868	1737	2698
80°	727	1440	2057
85°	509	899	1154



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.7	5.8
10°-20°	227.0	15.7
20°-30°	322.4	22.4
30°-40°	349.3	24.2
40°-50°	274.9	19.1
50°-60°	121.1	8.4
60°-70°	42.2	2.9
70°-80°	16.3	1.1
80°-90°	5.6	0.4
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°	633.1	43.9
0°-40°	982.5	68.1
0°-60°	1378.5	95.6
0°-90°	1442.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1442.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	897	897	897	897	897	
5°	1112	1052	890	721	666	113
15°	1521	1296	735	328	227	433
25°	1759	1329	445	129	102	802
35°	1635	1097	192	84	77	1025
45°	1277	636	82	59	57	975
55°	481	134	44	41	41	475
65°	120	31	23	32	38	126
75°	8	9	15	21	23	10
85°	3	4	5	7	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	897.4	897.4	897.4	897.4	897.4	897.4	897.4	897.4	897.4
2.5°	993.0	985.5	973.4	935.1	902.7	857.6	813.9	807.9	789.9
5°	1111.8	1095.3	1052.4	969.7	889.9	800.4	720.7	685.3	666.5
7.5°	1232.9	1206.6	1126.9	993.7	866.6	731.9	616.8	567.2	529.6
10°	1356.3	1312.7	1194.6	1008.0	832.7	654.5	514.5	447.6	413.7
12.5°	1457.1	1407.5	1252.5	1011.0	787.6	569.5	415.2	340.8	311.4
15°	1521.1	1485.7	1296.1	1004.3	735.0	485.2	328.0	252.0	227.2
17.5°	1579.7	1534.6	1329.2	985.5	668.8	404.0	248.2	186.6	168.5
20°	1639.9	1567.7	1345.0	955.4	597.3	324.2	189.6	151.2	140.7
22.5°	1703.1	1592.5	1343.5	915.5	534.1	260.3	155.0	127.1	117.4
25°	1758.8	1609.8	1329.2	860.6	445.3	204.6	129.4	109.1	101.6
27.5°	1768.5	1612.1	1299.1	792.9	369.4	167.0	112.1	96.3	91.8
30°	1737.7	1603.1	1248.0	716.1	300.9	139.9	97.8	89.5	85.8
32.5°	1689.6	1588.0	1153.2	631.9	240.7	120.4	89.5	84.3	81.2
35°	1635.4	1547.4	1096.8	541.6	191.8	103.8	83.5	79.7	76.7
37.5°	1584.2	1472.2	1004.3	452.9	155.7	90.3	77.5	75.2	73.0
40°	1526.3	1376.6	898.2	365.6	121.9	81.2	71.5	70.0	68.5
42.5°	1410.5	1252.5	777.8	273.8	100.8	72.2	65.4	63.9	62.4
45°	1276.6	1112.6	636.4	196.3	82.0	63.9	58.7	57.9	57.2
47.5°	1134.4	958.4	483.7	133.1	67.0	57.2	52.7	52.7	51.9
50°	961.4	771.8	338.5	88.8	57.9	50.4	48.1	47.4	48.9
52.5°	703.4	564.2	215.1	65.4	49.6	45.1	43.6	45.1	45.9
55°	481.4	373.9	133.9	54.2	43.6	39.9	40.6	42.9	41.4
57.5°	346.8	257.3	88.8	44.4	37.6	35.4	37.6	41.4	42.9
60°	263.3	185.8	60.2	36.9	31.6	32.3	35.4	40.6	42.1
62.5°	190.3	124.1	42.9	29.3	27.1	29.3	33.9	39.1	39.9
65°	119.6	69.2	30.8	23.3	23.3	27.1	32.3	36.9	37.6
67.5°	60.9	36.1	21.1	18.8	21.1	25.6	30.1	33.9	34.6
70°	21.8	18.1	15.0	15.8	18.8	23.3	27.1	30.1	30.8
72.5°	10.5	11.3	11.3	13.5	17.3	21.1	24.1	26.3	27.1
75°	7.5	8.3	9.0	11.3	15.0	18.1	21.1	22.6	23.3
77.5°	6.0	6.8	7.5	9.8	12.8	15.8	17.3	18.8	19.6
80°	5.3	5.3	6.8	8.3	10.5	12.0	13.5	15.0	15.0
82.5°	3.8	4.5	5.3	6.8	7.5	9.0	9.8	11.3	11.3
85°	3.0	3.0	3.8	4.5	5.3	6.0	6.8	7.5	6.8
87.5°	1.5	1.5	2.3	2.3	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)