

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: P130252

Luminaire Tested: **HL612ICAT - HLM6935 - HL6WFL - 456W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130252
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 - HLM6935 - 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 / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1606.3 lumens
Efficiency: N/A
Efficacy: 84.1 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

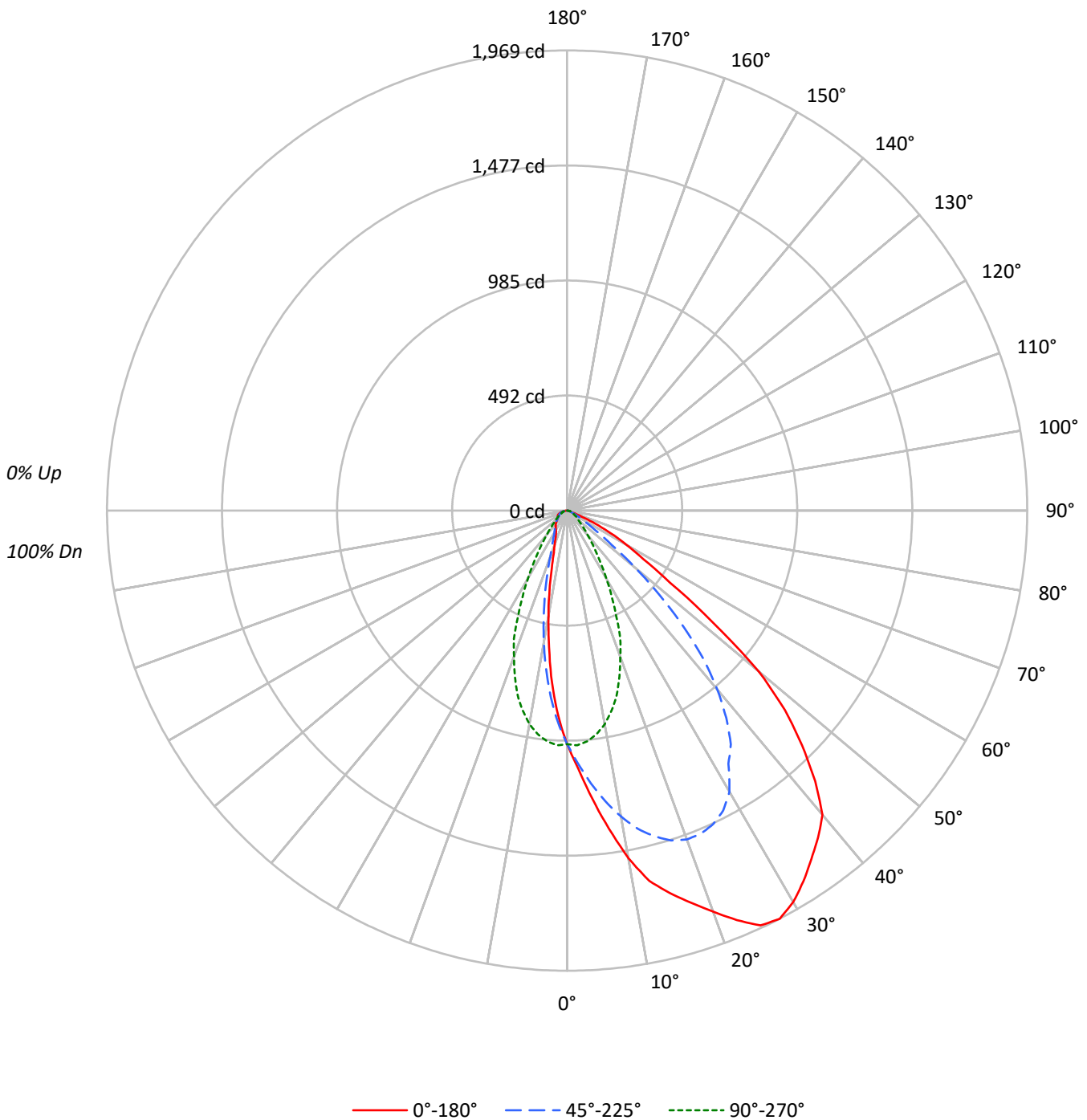
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	74	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°	59649	59649	59649
5°	72494	58025	43455
10°	87439	53684	26674
15°	97708	47207	14595
20°	105762	38522	9070
25°	114757	29060	6628
30°	115624	20019	5707
35°	111878	13123	5247
40°	108283	8646	4855
45°	94798	6089	4248
50°	75500	4549	3837
55°	40443	3666	3478
60°	23970	2878	3834
65°	11984	2339	3770
70°	2451	2108	3460
75°	973	1945	3011
80°	809	1604	2304
85°	577	1001	1272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.2	5.8
10°-20°	252.7	15.7
20°-30°	359.0	22.4
30°-40°	389.0	24.2
40°-50°	306.1	19.1
50°-60°	134.9	8.4
60°-70°	47.0	2.9
70°-80°	18.2	1.1
80°-90°	6.2	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°	705.0	43.9
0°-40°	1093.9	68.1
0°-60°	1534.9	95.6
0°-90°	1606.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1606.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	999	999	999	999	999	
5°	1238	1172	991	802	742	126
15°	1694	1443	818	365	253	482
25°	1958	1480	496	144	113	893
35°	1821	1221	214	93	85	1141
45°	1421	709	91	65	64	1085
55°	536	149	49	45	46	529
65°	133	34	26	36	42	140
75°	8	10	17	24	26	11
85°	3	4	6	8	8	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°	999.3	999.3	999.3	999.3	999.3	999.3	999.3	999.3	999.3
2.5°	1105.7	1097.3	1083.9	1041.2	1005.1	954.9	906.3	899.6	879.5
5°	1238.0	1219.6	1171.8	1079.7	990.9	891.2	802.4	763.1	742.1
7.5°	1372.9	1343.5	1254.7	1106.5	964.9	815.0	686.8	631.6	589.7
10°	1510.2	1461.6	1330.1	1122.4	927.2	728.7	572.9	498.4	460.7
12.5°	1622.5	1567.2	1394.6	1125.8	877.0	634.1	462.4	379.4	346.8
15°	1693.7	1654.3	1443.2	1118.2	818.3	540.3	365.2	280.6	253.0
17.5°	1759.0	1708.7	1480.1	1097.3	744.6	449.8	276.4	207.7	187.6
20°	1826.0	1745.6	1497.7	1063.8	665.1	361.0	211.1	168.4	156.6
22.5°	1896.4	1773.2	1496.0	1019.4	594.7	289.8	172.5	141.6	130.7
25°	1958.3	1792.5	1480.1	958.2	495.9	227.8	144.1	121.5	113.1
27.5°	1969.2	1795.0	1446.6	882.8	411.3	186.0	124.8	107.2	102.2
30°	1934.9	1785.0	1389.6	797.4	335.0	155.8	108.9	99.7	95.5
32.5°	1881.3	1768.2	1284.1	703.6	268.0	134.0	99.7	93.8	90.5
35°	1821.0	1723.0	1221.2	603.1	213.6	115.6	93.0	88.8	85.4
37.5°	1764.0	1639.2	1118.2	504.2	173.4	100.5	86.3	83.8	81.2
40°	1699.5	1532.8	1000.1	407.1	135.7	90.5	79.6	77.9	76.2
42.5°	1570.5	1394.6	866.1	304.9	112.2	80.4	72.9	71.2	69.5
45°	1421.4	1238.8	708.6	218.6	91.3	71.2	65.3	64.5	63.7
47.5°	1263.1	1067.1	538.6	148.3	74.5	63.7	58.6	58.6	57.8
50°	1070.5	859.4	376.9	98.8	64.5	56.1	53.6	52.8	54.4
52.5°	783.2	628.2	239.6	72.9	55.3	50.3	48.6	50.3	51.1
55°	536.1	416.3	149.1	60.3	48.6	44.4	45.2	47.7	46.1
57.5°	386.1	286.5	98.8	49.4	41.9	39.4	41.9	46.1	47.7
60°	293.2	206.9	67.0	41.0	35.2	36.0	39.4	45.2	46.9
62.5°	211.9	138.2	47.7	32.7	30.2	32.7	37.7	43.6	44.4
65°	133.2	77.1	34.3	26.0	26.0	30.2	36.0	41.0	41.9
67.5°	67.8	40.2	23.5	20.9	23.5	28.5	33.5	37.7	38.5
70°	24.3	20.1	16.8	17.6	20.9	26.0	30.2	33.5	34.3
72.5°	11.7	12.6	12.6	15.1	19.3	23.5	26.8	29.3	30.2
75°	8.4	9.2	10.1	12.6	16.8	20.1	23.5	25.1	26.0
77.5°	6.7	7.5	8.4	10.9	14.2	17.6	19.3	20.9	21.8
80°	5.9	5.9	7.5	9.2	11.7	13.4	15.1	16.8	16.8
82.5°	4.2	5.0	5.9	7.5	8.4	10.1	10.9	12.6	12.6
85°	3.4	3.4	4.2	5.0	5.9	6.7	7.5	8.4	7.5
87.5°	1.7	1.7	2.5	2.5	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)