

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: P130234

Luminaire Tested: **HL612ICAT - HLM6927 - HL6WFL - 455H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33485)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL612ICAT - HLM6927 - HL6WFL - 455H
Description: HALO ALLSLOPE 6" 21W, Semi-Specular Haze Reflector, 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: 1439.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 0.76 / 1.17
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

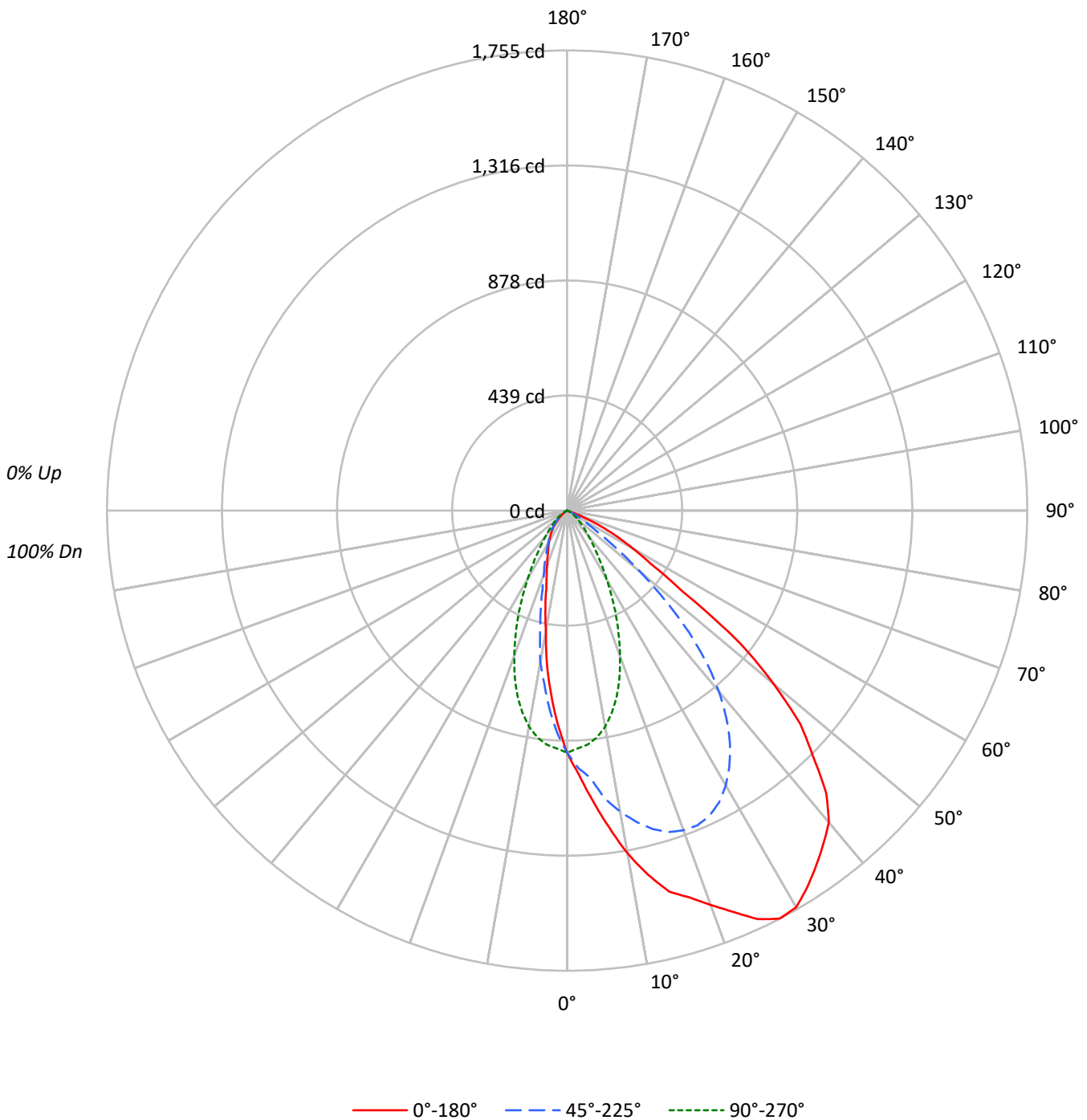
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	49	46	44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40
10	62	50	44	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	55089	55089	55089
5°	64923	52485	41084
10°	76878	48421	27085
15°	86805	42182	17676
20°	92683	34121	12945
25°	100752	25808	10062
30°	104378	17915	8270
35°	101673	12048	6549
40°	98936	8251	4951
45°	88509	5629	3408
50°	72404	3759	2038
55°	40594	2512	1064
60°	23717	1512	482
65°	13118	729	198
70°	2986	303	0
75°	255	174	0
80°	0	206	0
85°	0	254	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	5.9
10°-20°	231.8	16.1
20°-30°	328.5	22.8
30°-40°	357.4	24.8
40°-50°	284.6	19.8
50°-60°	120.2	8.4
60°-70°	28.0	1.9
70°-80°	2.1	0.1
80°-90°	0.8	0.1
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°	645.8	44.9
0°-40°	1003.3	69.7
0°-60°	1408.1	97.9
0°-90°	1439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1439.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	923	923	923	923	923	
5°	1109	1023	896	763	702	112
15°	1505	1257	731	386	306	425
25°	1719	1284	440	191	172	790
35°	1655	1083	196	113	107	1036
45°	1327	657	84	59	51	1018
55°	538	138	33	20	14	534
65°	146	23	8	4	2	146
75°	2	2	2	1	0	7
85°	0	1	2	1	0	0
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°	922.9	922.9	922.9	922.9	922.9	922.9	922.9	922.9	922.9
2.5°	1005.8	1013.2	982.9	952.5	908.1	890.4	851.1	835.6	815.6
5°	1108.7	1105.8	1022.9	979.9	896.3	837.1	763.1	729.0	701.6
7.5°	1216.8	1207.2	1108.7	997.0	871.9	771.2	666.9	615.8	590.6
10°	1327.8	1302.6	1165.7	1005.8	836.3	692.8	586.9	512.2	467.8
12.5°	1421.8	1392.2	1215.3	1005.8	788.2	611.3	475.2	406.3	384.1
15°	1504.7	1466.9	1256.7	991.8	731.2	529.2	386.3	323.4	306.4
17.5°	1546.1	1527.6	1285.6	969.6	664.6	445.6	312.3	271.6	259.8
20°	1600.2	1557.2	1297.4	934.8	589.1	364.9	258.3	233.9	223.5
22.5°	1656.4	1580.9	1298.9	889.6	513.6	298.3	227.2	203.5	196.1
25°	1719.3	1598.7	1284.1	833.4	440.4	244.2	191.0	177.6	171.7
27.5°	1754.8	1609.0	1254.5	767.5	367.1	207.2	165.8	161.3	153.9
30°	1746.7	1606.8	1210.1	689.1	299.8	174.7	144.3	141.4	138.4
32.5°	1703.8	1596.5	1152.4	607.6	242.0	149.5	128.0	125.1	122.1
35°	1654.9	1570.6	1082.8	519.6	196.1	128.0	113.2	109.5	106.6
37.5°	1604.6	1509.1	997.7	435.2	159.1	109.5	98.4	94.0	91.0
40°	1552.8	1421.0	900.7	355.3	129.5	95.5	85.1	80.7	77.7
42.5°	1463.2	1307.8	787.5	270.9	104.4	81.4	71.8	68.8	64.4
45°	1327.1	1156.8	657.2	193.9	84.4	68.1	59.2	53.3	51.1
47.5°	1207.2	1031.7	507.7	131.7	67.4	55.5	46.6	42.2	39.2
50°	1026.6	848.9	363.4	89.6	53.3	43.7	36.3	31.8	28.9
52.5°	834.9	618.0	236.1	60.0	42.9	34.8	27.4	22.9	20.7
55°	538.1	414.5	138.4	45.1	33.3	26.6	20.0	14.8	14.1
57.5°	378.9	285.7	85.1	34.8	25.9	19.2	14.1	10.4	8.9
60°	290.1	203.5	55.5	26.6	18.5	13.3	8.9	6.7	5.9
62.5°	214.6	138.4	37.0	19.2	12.6	8.9	5.9	4.4	3.7
65°	145.8	77.7	22.9	12.6	8.1	5.2	3.7	2.2	2.2
67.5°	74.0	37.0	13.3	8.1	5.2	3.0	2.2	1.5	0.7
70°	29.6	13.3	6.7	4.4	3.0	2.2	1.5	0.7	0.0
72.5°	7.4	5.2	3.7	2.2	2.2	1.5	0.7	0.7	0.0
75°	2.2	2.2	1.5	1.5	1.5	1.5	0.7	0.7	0.0
77.5°	0.7	0.7	0.7	1.5	1.5	1.5	0.7	0.7	0.0
80°	0.0	0.7	0.7	1.5	1.5	1.5	0.7	0.0	0.0
82.5°	0.0	0.7	0.7	1.5	1.5	1.5	0.7	0.0	0.0
85°	0.0	0.7	0.7	1.5	1.5	1.5	0.7	0.0	0.0
87.5°	0.0	0.7	0.7	1.5	1.5	1.5	0.7	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)