

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: P130268

Luminaire Tested: **HL612ICAT - HLM6935 - HL6WFL - 73PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130268  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33493)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL612ICAT - HLM6935 - HL6WFL - 73PS  
Description: HALO ALLSLOPE 6" 21W, Fresnel Glass Lens, White Polymer Trim Ring  
"Dead Front", Wet Location - Showerlight 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: 1272.7 lumens  
Efficiency: N/A  
Efficacy: 66.6 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 0.91 / 1.12  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

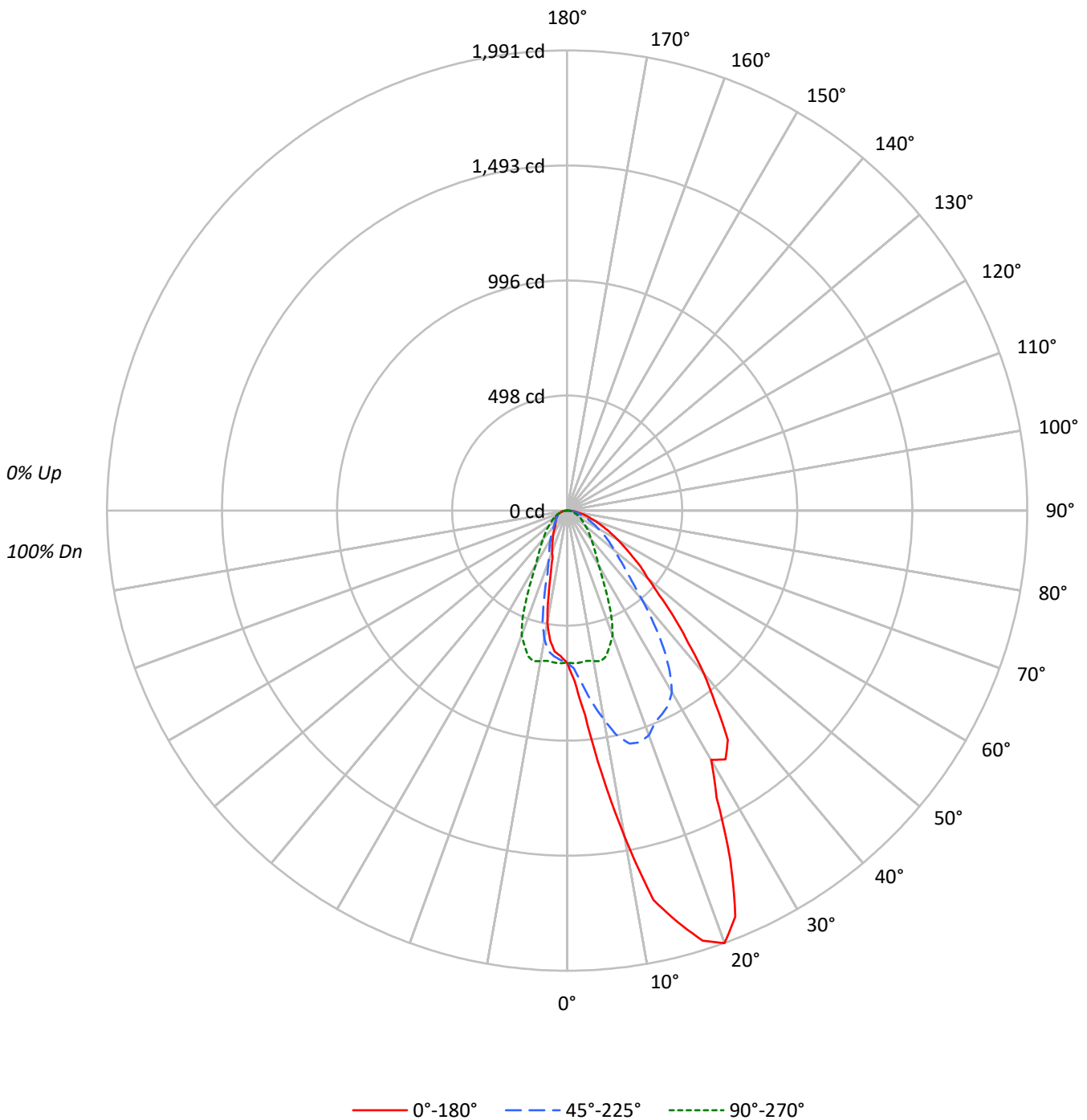
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68				68
4	89	79	71	66	87	78	71	65	75	69	64	73	68	64	71	66	63	61				61
5	83	72	64	59	81	71	64	58	69	63	58	67	61	57	65	60	57	55				55
6	77	66	58	53	76	65	58	53	63	57	52	62	56	52	60	55	51	49				49
7	73	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45				45
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41				41
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40	38				38
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35				35

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

	0°	90°	180°
0°	39288	39288	39288
5°	51911	38648	35849
10°	82928	38265	28480
15°	106309	37665	15363
20°	115342	33304	11068
25°	97986	24214	8813
30°	74434	16176	7189
35°	74463	12718	5923
40°	58566	10315	5129
45°	43664	8790	4722
50°	32133	7300	4493
55°	25830	6277	4474
60°	20684	5567	4488
65°	16321	4696	4535
70°	12670	3924	3833
75°	9831	3381	3381
80°	6678	2674	2907
85°	4801	1646	1951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	5.4
10°-20°	220.1	17.3
20°-30°	282.9	22.2
30°-40°	258.7	20.3
40°-50°	179.9	14.1
50°-60°	122.8	9.6
60°-70°	80.6	6.3
70°-80°	43.7	3.4
80°-90°	14.9	1.2
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°	572.1	45.0
0°-40°	830.8	65.3
0°-60°	1133.5	89.1
0°-90°	1272.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1272.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	658	658	658	658	658	
5°	886	756	660	633	612	103
15°	1843	1044	653	380	266	520
25°	1672	971	413	181	150	751
35°	1212	728	207	112	96	721
45°	655	353	132	74	71	509
55°	342	209	83	56	59	310
65°	181	112	52	42	50	182
75°	85	54	29	26	29	90
85°	28	17	10	10	12	29
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°	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2
2.5°	736.1	703.3	683.9	675.0	660.9	644.1	647.6	629.9	630.8
5°	886.5	825.4	755.5	695.4	660.0	630.8	633.4	612.2	612.2
7.5°	1145.7	1016.5	838.7	724.6	655.6	622.8	614.9	571.5	565.3
10°	1432.3	1234.1	919.2	742.3	660.9	611.3	564.4	505.2	491.9
12.5°	1725.1	1461.5	997.0	755.5	667.9	575.0	491.0	398.1	368.9
15°	1842.8	1618.1	1043.9	767.9	652.9	525.5	380.4	277.8	266.3
17.5°	1950.7	1678.3	1051.0	783.0	612.2	442.3	278.7	230.0	208.8
20°	1991.4	1642.9	1034.2	780.3	575.0	338.8	234.4	200.8	191.1
22.5°	1901.2	1527.0	992.6	752.9	502.5	268.1	203.5	176.1	169.9
25°	1672.1	1360.7	971.4	713.1	413.2	230.0	181.4	155.7	150.4
27.5°	1400.5	1229.7	948.4	646.7	330.9	203.5	161.9	140.7	133.6
30°	1245.6	1166.0	905.9	560.0	270.7	179.6	143.3	123.9	120.3
32.5°	1275.7	1157.2	827.2	470.7	235.3	159.2	128.3	109.7	107.9
35°	1212.0	1058.1	728.1	371.6	207.0	139.8	111.5	97.3	96.4
37.5°	1052.8	913.9	614.9	306.1	183.1	123.9	99.1	87.6	82.3
40°	919.2	782.1	504.3	264.5	161.9	110.6	89.4	80.5	80.5
42.5°	775.0	660.9	413.2	234.4	146.0	100.0	82.3	75.2	75.2
45°	654.7	544.1	353.0	208.8	131.8	90.2	74.3	69.0	70.8
47.5°	539.7	456.5	304.3	187.6	117.7	81.4	69.0	64.6	66.4
50°	455.6	391.0	267.2	165.4	103.5	73.4	63.7	61.9	63.7
52.5°	402.5	340.6	235.3	145.1	92.9	67.2	59.3	60.2	61.9
55°	342.4	295.5	208.8	127.4	83.2	61.9	55.7	56.6	59.3
57.5°	292.8	255.7	178.7	112.4	74.3	56.6	52.2	54.9	57.5
60°	253.0	222.1	154.8	99.1	68.1	51.3	48.7	53.1	54.9
62.5°	216.7	191.1	133.6	84.9	59.3	46.9	46.9	50.4	54.0
65°	181.4	160.1	112.4	72.5	52.2	42.5	42.5	47.8	50.4
67.5°	151.3	134.5	94.7	63.7	46.0	38.0	38.0	41.6	46.0
70°	125.6	110.6	78.7	53.1	38.9	33.6	33.6	35.4	38.0
72.5°	101.7	89.4	66.4	44.2	33.6	28.3	30.1	31.8	32.7
75°	84.9	73.4	54.0	36.3	29.2	24.8	26.5	27.4	29.2
77.5°	66.4	57.5	42.5	30.1	24.8	21.2	22.1	23.9	24.8
80°	48.7	42.5	31.8	23.0	19.5	17.7	18.6	21.2	21.2
82.5°	37.2	33.6	23.0	17.7	15.0	13.3	14.2	15.0	15.9
85°	28.3	22.1	16.8	11.5	9.7	8.8	9.7	10.6	11.5
87.5°	16.8	14.2	10.6	7.1	6.2	5.3	5.3	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)