

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: P130260

Luminaire Tested: **HL612ICAT - HLM6935 - HL6WFL - 70PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P130260  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33491)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HL612ICAT - HLM6935 - HL6WFL - 70PS  
Description: HALO ALLSLOPE 6" 21W, Albalite 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: 891.9 lumens  
Efficiency: N/A  
Efficacy: 46.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.05 / 1.23  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

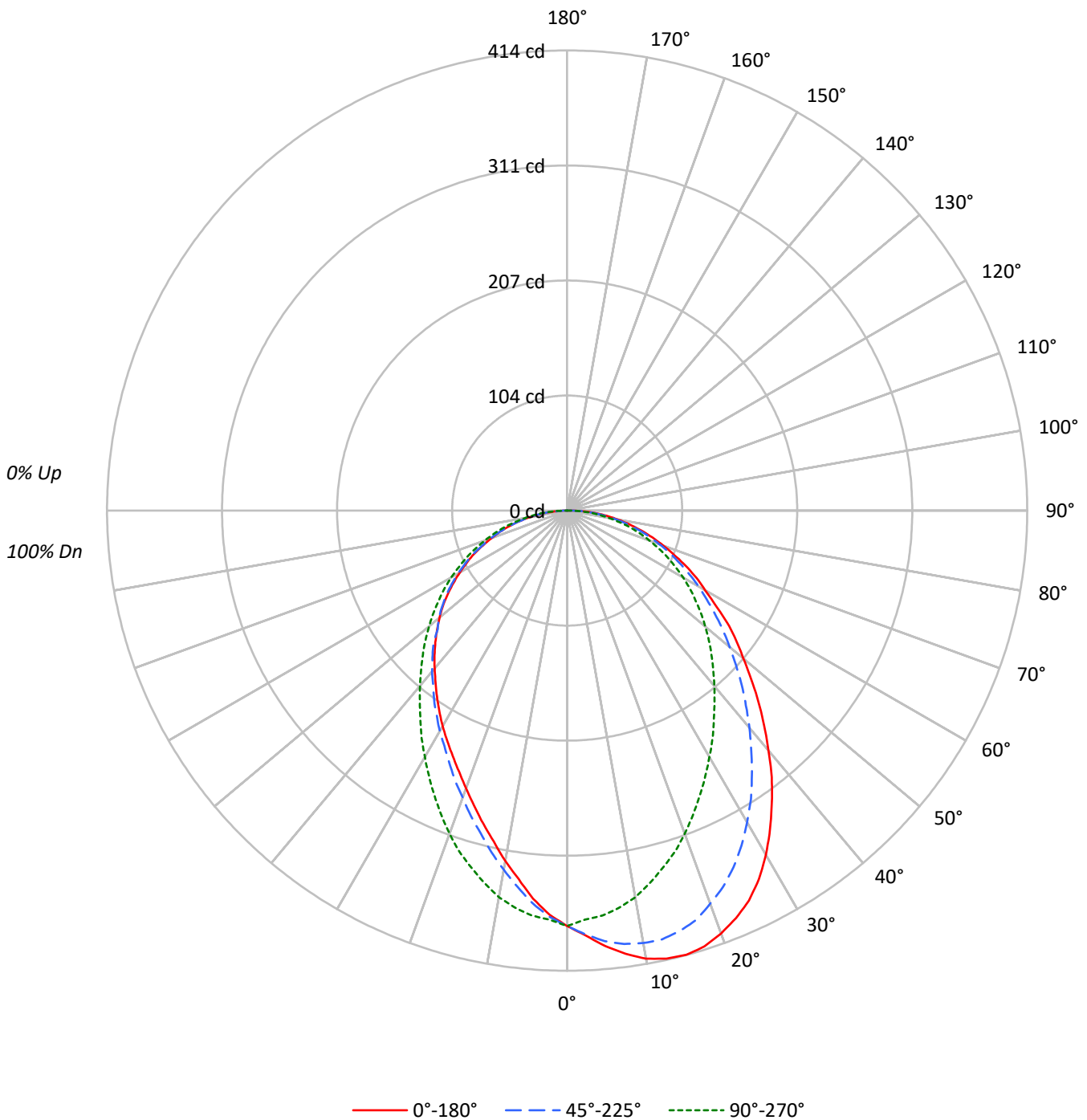
Input Watts (W): 19.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	91	80	72	66	88	78	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°	90°	180°
0°	22306	22306	22306
5°	23031	21414	20524
10°	23704	20450	18539
15°	23872	19193	16822
20°	23452	17926	15395
25°	22684	16566	14269
30°	21369	15298	13380
35°	19728	14137	12546
40°	17955	13125	11819
45°	16240	12252	11185
50°	14592	11447	10565
55°	13255	10629	9890
60°	11740	9843	9116
65°	10590	8988	8349
70°	9271	7919	7283
75°	7955	6820	6195
80°	6362	5252	4648
85°	4241	3325	2579



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.0	3.9
10°-20°	96.7	10.8
20°-30°	138.0	15.5
30°-40°	154.7	17.3
40°-50°	150.5	16.9
50°-60°	131.5	14.7
60°-70°	101.2	11.3
70°-80°	63.0	7.1
80°-90°	21.3	2.4
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°	269.7	30.2
0°-40°	424.5	47.6
0°-60°	706.4	79.2
0°-90°	891.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	891.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	374	374	374	374	374	
5°	393	389	366	355	350	38
15°	414	392	333	300	292	117
25°	387	354	283	251	244	177
35°	321	290	230	209	204	201
45°	244	222	184	170	168	188
55°	176	162	141	133	131	157
65°	118	112	100	94	93	117
75°	69	66	59	54	54	73
85°	25	22	20	16	15	27
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°	373.7	373.7	373.7	373.7	373.7	373.7	373.7	373.7	373.7
2.5°	382.6	379.9	381.7	377.2	368.3	363.9	365.7	365.7	363.9
5°	393.3	389.7	388.8	379.9	365.7	355.8	354.9	351.4	350.5
7.5°	402.2	397.8	393.3	379.0	360.3	346.0	341.6	336.2	334.4
10°	409.4	403.1	395.1	376.4	353.2	335.3	328.2	322.0	320.2
12.5°	412.9	405.8	395.1	371.0	343.4	323.7	314.8	306.8	305.0
15°	413.8	405.8	391.5	363.9	332.7	311.2	300.5	292.5	291.6
17.5°	411.1	402.2	386.2	354.1	322.0	298.8	288.1	280.9	278.3
20°	404.9	395.1	376.4	342.5	309.5	285.4	274.7	267.6	265.8
22.5°	396.9	387.1	366.5	330.9	296.1	272.0	263.1	256.8	254.2
25°	387.1	376.4	354.1	317.5	282.7	260.4	250.6	244.4	243.5
27.5°	373.7	362.1	339.8	302.3	269.3	247.9	239.0	234.6	233.7
30°	357.6	346.9	323.7	287.2	256.0	236.3	229.2	224.7	223.9
32.5°	339.8	330.0	307.7	272.9	243.5	225.6	218.5	214.9	214.0
35°	321.1	311.2	289.8	256.8	230.1	214.0	208.7	205.1	204.2
37.5°	302.3	292.5	272.0	241.7	217.6	203.3	198.0	195.3	194.4
40°	281.8	273.8	255.1	227.4	206.0	192.6	189.1	185.5	185.5
42.5°	262.2	255.1	238.1	213.1	194.4	183.7	179.3	176.6	176.6
45°	243.5	237.2	222.1	200.7	183.7	173.9	170.3	167.7	167.7
47.5°	224.7	219.4	206.0	186.4	173.0	163.2	157.9	157.9	158.7
50°	206.9	202.4	190.9	173.9	162.3	154.3	150.7	148.9	149.8
52.5°	191.7	186.4	176.6	162.3	151.6	144.5	141.8	140.0	140.9
55°	175.7	171.2	162.3	150.7	140.9	134.7	132.9	127.5	131.1
57.5°	157.9	156.1	148.9	139.1	131.1	124.9	123.1	121.3	121.3
60°	143.6	141.8	136.5	127.5	120.4	115.0	113.3	111.5	111.5
62.5°	131.1	128.4	124.0	115.9	109.7	105.2	103.5	101.7	101.7
65°	117.7	115.0	111.5	105.2	99.9	95.4	93.6	91.9	92.8
67.5°	104.3	102.6	99.9	93.6	89.2	85.6	82.9	82.0	82.0
70°	91.9	91.0	88.3	82.9	78.5	75.8	73.1	72.2	72.2
72.5°	80.3	79.4	76.7	72.2	68.7	66.0	63.3	62.4	63.3
75°	68.7	67.8	66.0	61.5	58.9	56.2	53.5	52.6	53.5
77.5°	57.1	57.1	54.4	51.7	48.2	46.4	43.7	42.8	43.7
80°	46.4	46.4	43.7	41.0	38.3	35.7	33.9	33.9	33.9
82.5°	35.7	33.9	33.0	30.3	28.5	26.8	25.0	24.1	24.1
85°	25.0	25.0	22.3	20.5	19.6	16.9	16.1	15.2	15.2
87.5°	15.2	15.2	13.4	11.6	10.7	8.0	6.2	7.1	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)