

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: P130264

Luminaire Tested: **HL612ICAT - HLM6935 - HL6WFL - 71PS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P130264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33492)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL612ICAT - HLM6935 - HL6WFL - 71PS
Description: HALO ALLSLOPE 6" 21W, Drop Opal 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: 892.8 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.29 / 1.46
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')
CIE Type: Direct

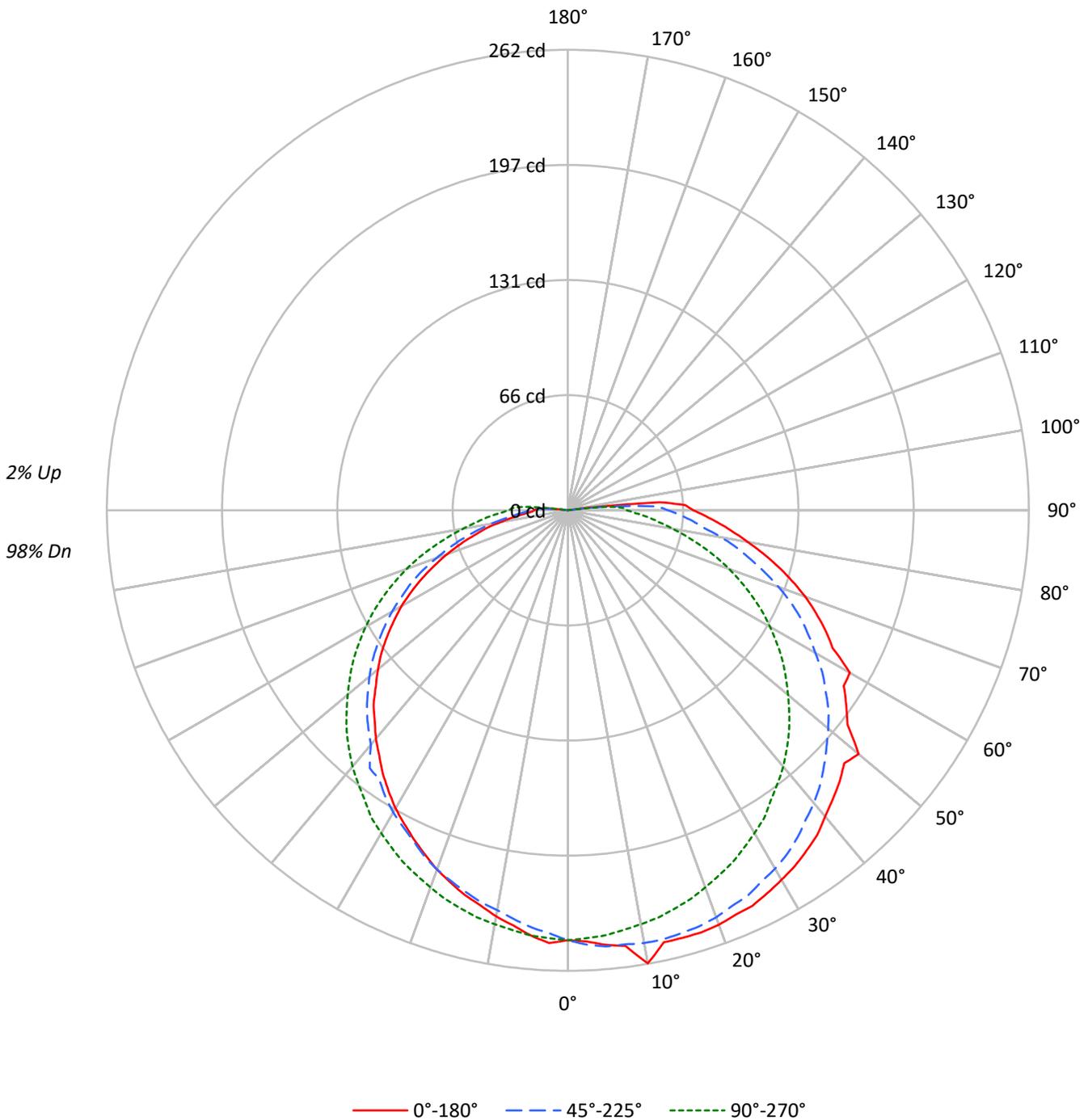
Input Watts (W): 19.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	106	100	95	90	103	97	92	88	92	89	85	88	85	82	84	81	79	77
2	95	86	78	71	92	83	76	70	79	73	68	76	71	66	72	68	64	62
3	86	74	65	58	83	72	64	57	69	62	56	66	60	55	63	58	53	51
4	78	65	56	48	76	64	55	48	61	53	47	58	51	46	56	50	45	43
5	72	58	48	41	69	57	48	41	54	46	40	52	45	39	50	44	39	36
6	66	52	42	36	64	51	42	35	49	41	35	47	40	34	45	39	34	31
7	61	47	38	31	59	46	37	31	44	36	31	42	35	30	41	35	30	28
8	57	43	34	28	55	42	33	27	40	33	27	39	32	27	37	31	26	24
9	53	39	31	25	52	38	30	25	37	30	24	36	29	24	35	28	24	22
10	50	36	28	22	48	35	27	22	34	27	22	33	26	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	14600	14600	14600
5°	14534	14218	14218
10°	15152	13844	13583
15°	14526	13534	13067
20°	14532	13223	12598
25°	14545	12957	12113
30°	14509	12675	11700
35°	14524	12361	11255
40°	14489	12131	10812
45°	14566	11858	10411
50°	15213	11517	9930
55°	14567	11233	9460
60°	15125	10849	8928
65°	14530	10392	8196
70°	14476	9836	7374
75°	14312	9090	6369
80°	14233	8296	5320
85°	14691	7804	4292



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.2	2.6
10°-20°	67.1	7.5
20°-30°	103.8	11.6
30°-40°	129.8	14.5
40°-50°	141.9	15.9
50°-60°	139.1	15.6
60°-70°	120.8	13.5
70°-80°	89.7	10.1
80°-90°	56.2	6.3
90°-100°	21.1	2.4
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°	194.1	21.7
0°-40°	323.9	36.3
0°-60°	604.8	67.8
0°-90°	871.6	97.6
90°-120°	21.1	2.4
90°-150°	21.1	2.4
90°-180°	21.0	2.4
0°-180°	892.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	245	245	245	245	245	
5°	248	249	243	238	243	24
15°	252	249	235	225	226	72
25°	248	242	221	208	207	114
35°	236	227	201	187	183	148
45°	218	206	178	162	156	169
55°	193	179	149	132	125	175
65°	162	146	116	98	91	161
75°	124	107	78	61	55	131
85°	87	71	46	30	25	74
90°	71	57	33	22	19	39
95°	52	25	23	8	13	23
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6
2.5°	245.5	247.3	247.3	246.4	243.7	244.6	240.9	241.9	246.4
5°	248.2	249.1	249.1	246.4	242.8	242.8	238.2	238.2	242.8
7.5°	250.0	250.9	249.1	246.4	240.9	240.0	234.6	234.6	238.2
10°	261.7	251.8	250.0	245.5	239.1	237.3	231.0	231.9	234.6
12.5°	251.8	251.8	250.0	244.6	237.3	234.6	228.3	227.4	230.1
15°	251.8	251.8	249.1	242.8	234.6	231.9	224.7	223.8	226.5
17.5°	251.8	251.8	248.2	240.9	231.9	228.3	221.1	220.2	222.0
20°	250.9	250.9	246.4	238.2	228.3	224.7	217.5	215.7	217.5
22.5°	249.1	249.1	243.7	235.5	224.7	220.2	213.0	211.2	212.1
25°	248.2	247.3	241.9	231.9	221.1	216.6	207.6	206.7	206.7
27.5°	245.5	244.6	238.2	229.2	216.6	211.2	203.0	201.2	201.2
30°	242.8	241.9	235.5	224.7	212.1	206.7	198.5	195.8	195.8
32.5°	240.0	239.1	231.9	221.1	207.6	201.2	193.1	190.4	189.5
35°	236.4	235.5	227.4	215.7	201.2	194.9	186.8	185.0	183.2
37.5°	232.8	231.0	222.0	210.3	195.8	189.5	185.0	178.7	176.0
40°	227.4	226.5	217.5	204.9	190.4	185.9	174.2	173.3	169.7
42.5°	222.9	221.1	212.1	199.4	184.1	176.0	167.9	165.1	162.4
45°	218.4	215.7	205.8	193.1	177.8	169.7	161.5	157.9	156.1
47.5°	213.0	213.9	199.4	186.8	170.6	162.4	154.3	150.7	148.0
50°	215.7	204.9	193.1	179.6	163.3	155.2	147.1	143.5	140.8
52.5°	200.3	197.6	186.8	172.4	156.1	148.0	139.9	136.3	133.6
55°	193.1	190.4	178.7	165.1	148.9	139.9	131.8	128.1	125.4
57.5°	185.9	183.2	171.5	157.9	140.8	131.8	123.6	120.0	117.3
60°	185.0	175.1	162.4	149.8	132.7	123.6	115.5	114.6	109.2
62.5°	169.7	166.9	154.3	140.8	124.5	114.6	106.5	102.9	100.2
65°	161.5	158.8	146.2	131.8	115.5	105.6	98.4	93.9	91.1
67.5°	152.5	149.8	137.2	122.7	106.5	96.6	89.3	85.7	82.1
70°	143.5	140.8	127.2	113.7	97.5	87.5	79.4	75.8	73.1
72.5°	133.6	130.9	117.3	103.8	88.4	77.6	70.4	66.8	64.1
75°	123.6	120.9	107.4	94.8	78.5	68.6	61.4	57.8	55.0
77.5°	113.7	111.0	98.4	84.8	69.5	59.6	52.3	48.7	47.8
80°	103.8	101.1	88.4	74.9	60.5	50.5	44.2	40.6	38.8
82.5°	94.8	92.0	78.5	66.8	52.3	42.4	36.1	33.4	31.6
85°	86.6	83.0	71.3	58.7	46.0	35.2	29.8	26.2	25.3
87.5°	78.5	74.9	64.1	51.4	38.8	29.8	24.4	21.7	20.8
90°	71.3	67.7	56.9	45.1	33.4	26.2	21.7	19.9	19.0
92.5°	66.8	62.3	50.5	38.8	31.6	24.4	18.0	17.1	18.0
95°	52.3	38.8	25.3	24.4	22.6	13.5	8.1	9.9	12.6
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)