

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P27016

Luminaire Tested: **L1LPM927**

Test Date: 11/07/15



Test Information

Test Method: LM-79-08
Report Number: P27016
Test Lab: INNOVATION CENTER-P2
Test Date: 11/07/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L1LPM927
Description: HALO LED PENDANT 2700K
Light Source: (1) 2700K CREE LED
XHP
Ballast/Driver: (1) LET ELECTRONIC DRIVER
RD-14004

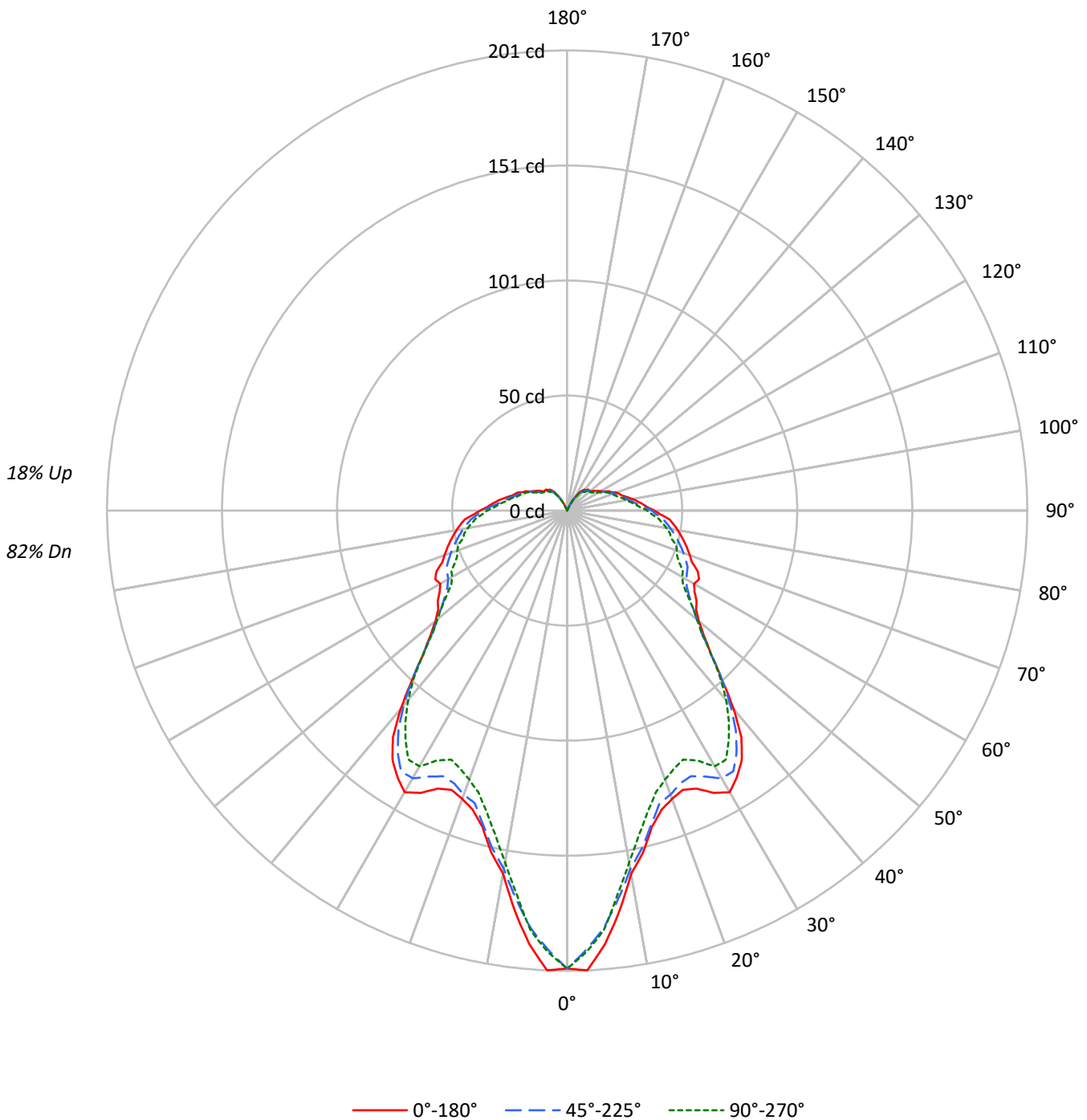
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 593.6 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.78 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 0.25' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 8.3
Input Voltage (V): 120.05
Input Current (A_{in}): 0.69803
Voltage Rise (V): NR
Power Factor: 0.9941
Total Harmonic Distortion (THDi): 9.56%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P27016
CATALOG NUMBER: L1LPM927

Luminous Intensity Polar Plot





TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	82
1	102	96	91	86	97	92	87	83	84	80	77	77	74	71	70	68	66	62
2	92	83	75	69	87	79	72	66	72	67	62	66	62	58	61	57	54	51
3	83	72	63	56	79	69	61	55	64	57	51	58	53	48	53	49	45	42
4	76	64	55	48	73	61	53	46	56	49	44	52	46	41	48	43	39	36
5	70	57	48	41	67	55	46	40	51	43	38	47	40	36	43	38	34	31
6	65	51	42	36	62	49	41	35	46	38	33	42	36	31	39	34	30	27
7	60	46	38	31	57	45	37	31	42	34	29	39	32	28	36	30	26	24
8	56	42	34	28	53	41	33	27	38	31	26	35	29	25	33	28	24	22
9	52	39	31	25	50	38	30	25	35	28	24	33	27	22	30	25	21	19
10	49	36	28	23	47	35	27	22	32	26	21	30	25	20	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34445	34445	34445
5°	30205	28154	29251
10°	23935	22256	23192
15°	20109	18361	19124
20°	18005	15971	16796
25°	17366	14657	15551
30°	17903	14779	16264
35°	16447	13627	15210
40°	13814	11412	13202
45°	10838	8979	10838
50°	9168	7383	9046
55°	8532	6463	7914
60°	8069	5991	7312
65°	8165	5861	6998
70°	7659	5566	6853
75°	7453	5300	6609
80°	7285	5058	6541
85°	7154	4835	6359



TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.8	2.8
10°-20°	40.0	6.7
20°-30°	60.3	10.2
30°-40°	79.7	13.4
40°-50°	70.0	11.8
50°-60°	59.8	10.1
60°-70°	57.8	9.7
70°-80°	53.4	9.0
80°-90°	46.0	7.8
90°-100°	34.9	5.9
100°-110°	26.1	4.4
110°-120°	19.1	3.2
120°-130°	12.9	2.2
130°-140°	9.5	1.6
140°-150°	5.8	1.0
150°-160°	1.3	0.2
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	117.2	19.7
0°-40°	196.9	33.2
0°-60°	326.7	55.0
0°-90°	483.9	81.5
90°-120°	80.1	13.5
90°-150°	108.4	18.3
90°-180°	110.0	18.5
0°-180°	593.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	200	200	200	200	200	
5°	190	186	183	187	184	17
15°	143	143	142	143	136	41
25°	134	131	128	127	120	63
35°	133	133	129	129	123	82
45°	89	90	89	92	89	70
55°	69	69	65	67	64	62
65°	63	63	58	58	54	61
75°	53	53	50	51	47	56
85°	45	45	42	43	40	37
90°	38	38	37	37	35	21
95°	33	33	31	32	30	26
105°	25	26	24	25	23	27
115°	20	20	19	20	19	20
125°	15	15	14	14	14	13
135°	13	13	12	12	12	10
145°	10	10	9	10	9	6
155°	2	2	2	2	1	1
165°	0	1	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	200	200	200	200	200	200	200	200	200	200	200
2.5°	201	191	192	196	198	196	197	195	199	198	192
5°	190	180	180	184	187	186	186	185	189	189	183
7.5°	176	167	167	171	174	172	174	172	176	176	171
10°	161	153	154	158	161	160	161	159	163	163	159
12.5°	153	145	145	149	152	151	153	151	155	155	151
15°	143	137	137	141	144	143	144	143	146	146	142
17.5°	137	130	131	134	138	137	139	137	140	139	134
20°	134	127	127	131	133	133	134	133	137	136	132
22.5°	132	126	125	129	131	130	132	130	133	133	129
25°	134	127	126	130	132	131	133	130	133	132	128
27.5°	139	132	131	135	137	136	137	134	136	135	131
30°	142	135	135	140	142	142	142	140	142	140	135
32.5°	138	132	132	137	140	139	140	138	141	140	135
35°	133	127	126	131	133	133	134	132	135	134	129
37.5°	125	120	119	123	125	125	126	124	127	125	121
40°	113	109	108	111	114	114	115	113	116	116	111
42.5°	100	96	95	99	101	102	102	101	104	103	100
45°	89	85	84	88	89	90	91	90	92	92	89
47.5°	81	78	77	79	81	81	81	81	82	82	80
50°	75	72	71	74	75	75	75	74	76	76	74
52.5°	71	69	68	70	71	71	71	70	72	71	69
55°	69	66	65	67	68	69	68	67	68	67	65
57.5°	66	63	62	64	65	66	66	64	65	64	62
60°	64	62	61	63	64	64	64	63	63	62	60
62.5°	65	62	62	63	64	64	63	62	63	62	59
65°	63	61	60	61	62	63	62	60	61	60	58
67.5°	59	57	57	58	59	60	58	57	58	58	56
70°	57	55	54	55	56	57	56	55	56	55	54
72.5°	55	53	52	54	54	55	54	53	54	53	52
75°	53	52	51	52	53	53	52	51	52	52	50
77.5°	51	49	48	49	50	51	50	49	49	49	48
80°	49	48	47	48	48	49	48	47	48	47	46
82.5°	47	46	45	46	46	47	46	45	46	45	44
85°	45	44	43	43	44	45	44	43	43	43	42
87.5°	41	41	40	40	41	42	41	40	40	40	39
90°	38	37	37	37	38	38	37	37	38	37	37
92.5°	35	35	34	34	35	36	35	35	35	35	34
95°	33	32	31	32	32	33	32	32	32	32	31
97.5°	31	30	29	30	30	31	30	30	30	30	29
100°	29	28	27	28	28	29	28	28	28	28	27
102.5°	27	26	26	26	26	27	26	26	26	26	26
105°	25	25	24	25	25	26	25	25	25	25	24
107.5°	24	24	23	23	23	24	24	24	24	24	23
110°	23	22	22	22	22	23	22	22	22	22	22



TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	21	21	20	20	20	21	21	21	21	21	20
115°	20	20	19	19	19	20	19	19	19	19	19
117.5°	18	18	18	18	18	19	18	18	18	18	18
120°	17	17	16	16	16	17	17	17	17	17	16
122.5°	16	16	15	15	15	16	15	15	15	15	15
125°	15	15	14	14	14	15	14	14	14	14	14
127.5°	14	14	14	13	13	14	14	14	14	14	13
130°	13	14	13	13	13	14	13	13	13	13	13
132.5°	13	13	13	13	13	13	13	13	13	13	13
135°	13	13	12	12	12	13	12	12	12	12	12
137.5°	12	12	12	12	12	13	12	12	12	12	12
140°	12	12	11	11	11	12	11	12	12	12	11
142.5°	11	11	11	11	11	11	11	11	11	11	10
145°	10	10	10	9	9	10	9	9	10	10	9
147.5°	8	8	8	8	8	8	8	8	8	8	8
150°	6	6	6	6	6	7	6	6	6	6	6
152.5°	4	4	4	4	4	4	4	4	4	4	4
155°	2	2	2	2	2	2	2	2	2	2	2
157.5°	1	1	1	1	1	1	1	1	1	1	1
160°	1	1	1	1	1	1	1	1	1	1	1
162.5°	0	1	1	0	1	1	1	1	1	1	0
165°	0	0	0	0	0	1	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	200	200	200	200	200	200	200	200	200	200
2.5°	192	197	187	201	197	196	198	192	195	193
5°	183	188	179	192	187	186	189	183	185	184
7.5°	171	175	166	178	174	173	174	169	171	169
10°	158	162	154	164	161	160	161	155	157	156
12.5°	150	154	145	155	152	150	151	145	147	145
15°	141	145	137	145	143	141	141	136	137	136
17.5°	134	137	130	138	135	133	134	129	130	129
20°	131	134	127	134	131	130	130	125	127	125
22.5°	128	131	124	131	129	127	128	123	124	122
25°	127	130	122	129	127	125	125	120	122	120
27.5°	130	132	125	132	130	129	129	124	125	123
30°	133	135	128	137	135	134	134	130	131	129
32.5°	133	135	128	137	135	135	135	130	132	129
35°	128	130	122	130	129	128	128	123	126	123
37.5°	120	122	115	123	122	120	121	116	119	116
40°	111	113	106	114	113	111	112	108	111	108
42.5°	100	103	97	103	103	101	103	99	101	99
45°	89	92	87	93	92	91	92	88	90	89
47.5°	80	83	78	84	83	82	83	80	82	80
50°	74	76	72	77	76	76	77	74	75	74
52.5°	69	71	66	72	71	70	71	69	71	69
55°	65	67	63	67	67	66	67	65	66	64
57.5°	61	63	59	63	63	62	63	60	62	60
60°	59	60	57	61	60	60	60	58	59	58
62.5°	59	60	56	60	60	59	59	57	58	57
65°	57	59	55	59	58	57	57	55	56	54
67.5°	55	57	53	56	56	55	55	52	53	52
70°	54	55	51	55	54	53	53	51	52	51
72.5°	52	53	50	53	53	52	52	50	51	50
75°	50	51	48	51	51	50	50	48	49	47
77.5°	48	49	46	49	49	48	48	46	47	46
80°	46	47	44	47	47	46	46	44	45	44
82.5°	44	45	43	45	45	44	45	43	43	42
85°	42	43	40	43	43	42	42	40	41	40
87.5°	40	40	38	40	40	39	40	38	38	37
90°	37	37	35	37	37	36	37	35	36	35
92.5°	34	35	33	34	35	34	34	33	33	32
95°	32	32	31	32	32	31	32	30	31	30
97.5°	30	30	29	30	30	29	30	28	29	28
100°	28	28	27	28	28	28	28	27	27	26
102.5°	26	26	25	26	27	26	26	25	25	25
105°	25	25	24	25	25	25	25	24	24	23
107.5°	23	23	22	23	24	23	23	22	23	22
110°	22	22	21	22	22	22	22	21	22	21



TEST NUMBER: P27016
 CATALOG NUMBER: L1LPM927

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	21	21	20	21	21	21	21	20	20	20
115°	19	19	19	20	20	19	20	19	20	19
117.5°	18	18	17	18	18	18	18	17	18	17
120°	16	16	16	17	17	16	17	16	16	16
122.5°	15	15	15	15	15	15	15	15	15	14
125°	14	14	14	14	14	14	14	14	14	14
127.5°	13	13	13	14	14	13	14	13	14	13
130°	13	13	13	13	13	13	13	13	13	13
132.5°	12	12	13	13	13	13	13	12	13	12
135°	12	12	12	12	12	12	12	12	12	12
137.5°	12	12	12	12	12	12	12	12	12	11
140°	11	11	11	12	12	11	12	11	11	11
142.5°	10	10	10	11	11	11	11	10	11	10
145°	9	9	9	10	10	9	10	9	9	9
147.5°	8	8	8	8	8	8	8	8	8	7
150°	6	6	6	6	6	6	6	6	6	6
152.5°	4	4	4	4	4	4	4	4	4	3
155°	2	2	2	2	2	2	2	1	2	1
157.5°	1	1	1	1	1	1	1	1	1	1
160°	0	1	0	1	1	1	1	0	1	0
162.5°	0	0	0	1	1	0	0	0	1	0
165°	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)