

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E395644

Luminaire Tested: **H-2577-P (LOWER HEMISPHERE)**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: E395644
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H-2577-P (LOWER HEMISPHERE)
Description: HALO CASCADE II
Light Source: PL13 900 LUMENS
Ballast/Driver: -

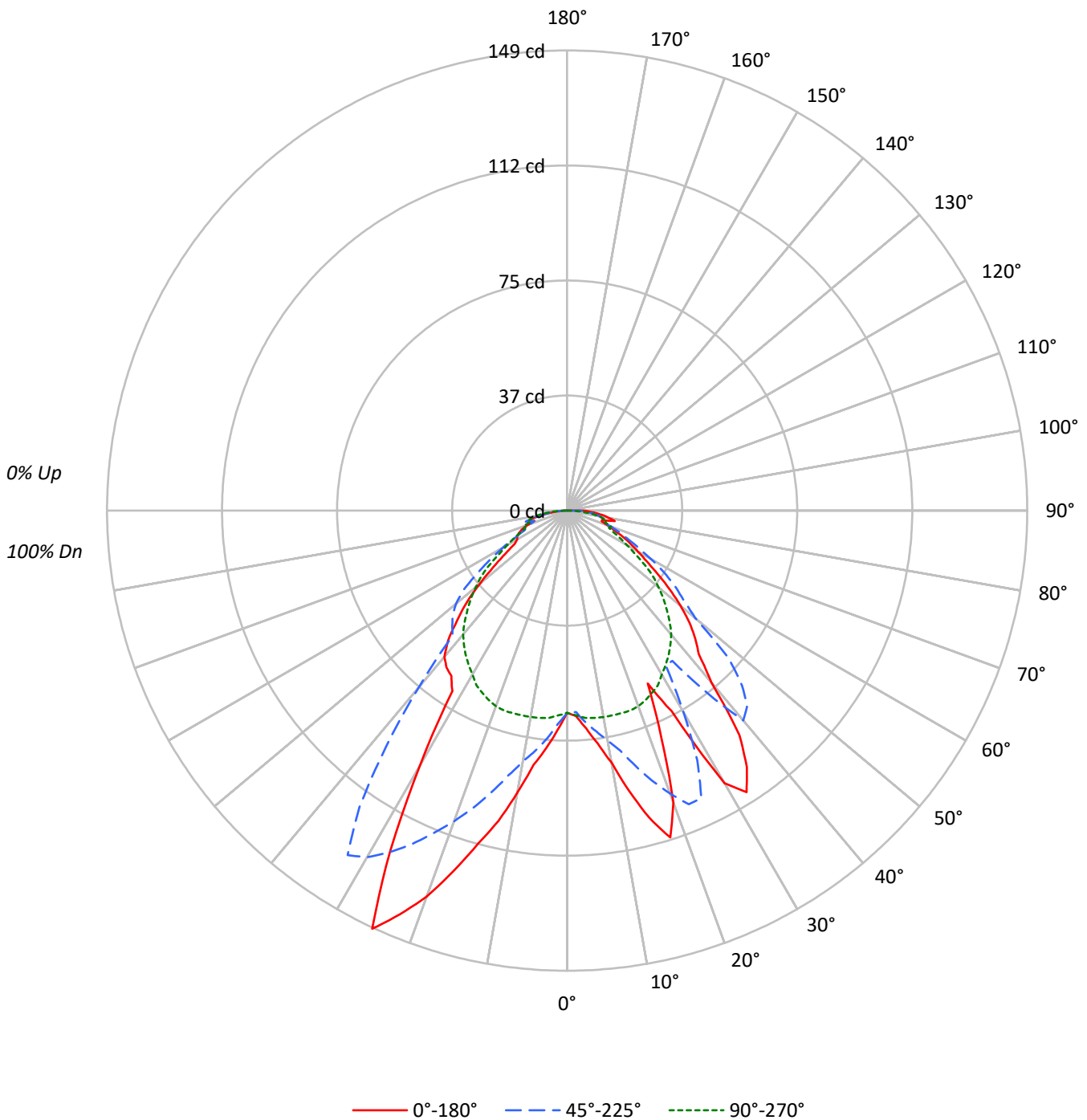
Summary

Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 243.5 lumens
Efficiency: 27.1%
Efficacy: 18.7 lumens/watt
Spacing Criteria (0/90/45): 1.63 / 1.36 / 1.62
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V): NR
Input Current (A_{in}): 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	32	32	32	32	31	31	31	31	30	30	30	29	29	29	28	28	28	27
1	30	28	27	26	29	28	27	26	27	26	25	26	25	24	25	24	24	23
2	27	25	23	22	26	25	23	22	24	22	21	23	22	21	22	21	20	20
3	25	22	20	18	24	22	20	18	21	19	18	20	19	18	20	18	17	17
4	23	20	18	16	22	19	17	16	19	17	16	18	17	15	18	16	15	15
5	21	18	16	14	21	18	15	14	17	15	14	16	15	13	16	14	13	13
6	20	16	14	12	19	16	14	12	15	13	12	15	13	12	15	13	12	11
7	18	15	12	11	18	14	12	11	14	12	11	14	12	11	13	12	11	10
8	17	13	11	10	17	13	11	10	13	11	10	13	11	9	12	11	9	9
9	16	12	10	9	15	12	10	9	12	10	9	12	10	9	11	10	9	8
10	15	11	9	8	14	11	9	8	11	9	8	11	9	8	10	9	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	705	705	705
5°	765	728	833
10°	906	742	1013
15°	1148	757	1245
20°	1152	772	1523
25°	734	773	1774
30°	1267	762	1183
35°	1332	752	859
40°	1022	736	868
45°	892	696	767
50°	800	646	620
55°	670	576	458
60°	568	482	403
65°	502	418	441
70°	437	475	422
75°	487	549	566
80°	855	651	521
85°	1161	642	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	7.0	2.9	0.8
10°-20°	25.4	10.4	2.8
20°-30°	44.0	18.1	4.9
30°-40°	51.4	21.1	5.7
40°-50°	46.2	19.0	5.1
50°-60°	31.9	13.1	3.5
60°-70°	18.8	7.7	2.1
70°-80°	12.8	5.3	1.4
80°-90°	6.0	2.5	0.7
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	76.4	31.4	8.5
0°-40°	127.8	52.5	14.2
0°-60°	205.9	84.5	22.9
0°-90°	243.5	100.0	27.1
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	243.5	100.0	27.1

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	66	66	66	66	66	
5°	71	69	67	74	77	7
15°	103	86	68	94	112	29
25°	62	103	65	119	149	36
35°	101	59	57	117	65	61
45°	59	80	46	53	50	45
55°	36	43	31	36	24	32
65°	20	22	16	15	17	20
75°	12	13	13	14	14	14
85°	9	7	5	4	3	10
90°	5	4	2	1	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
2.5°	66.6	65.9	65.3	64.2	66.4	67.7	69.2	70.6	71.1
5°	70.8	70.2	68.9	65.8	67.4	70.1	74.0	76.3	77.1
7.5°	76.1	74.8	72.1	66.9	67.7	72.3	78.4	82.3	83.0
10°	82.9	81.1	75.6	68.4	67.9	74.9	82.4	89.6	92.7
12.5°	93.1	89.0	79.7	70.2	67.9	77.0	87.8	98.4	102.9
15°	103.0	97.8	85.6	71.9	67.9	79.2	94.3	106.7	111.7
17.5°	111.0	106.3	91.8	73.2	67.9	80.9	100.8	116.6	122.4
20°	100.6	107.0	97.5	74.4	67.4	82.7	107.0	125.4	133.0
22.5°	79.6	93.3	102.9	76.1	66.4	84.9	113.0	135.1	141.5
25°	61.8	71.1	102.8	77.3	65.1	86.3	119.2	143.7	149.4
27.5°	73.2	60.8	91.2	78.1	63.7	87.7	124.7	139.8	123.9
30°	101.9	78.7	75.3	78.5	61.3	88.3	129.6	114.5	95.2
32.5°	108.1	99.9	59.4	78.6	59.3	88.3	132.3	87.8	69.2
35°	101.4	102.0	59.4	78.3	57.2	88.4	117.2	65.1	65.4
37.5°	91.7	96.5	74.4	76.5	54.9	87.4	96.3	62.9	64.1
40°	72.7	87.6	88.7	72.1	52.4	86.4	74.9	61.2	61.8
42.5°	63.1	67.2	86.2	63.8	49.2	84.1	54.9	58.7	57.1
45°	58.6	59.6	80.1	53.6	45.7	79.8	52.6	53.9	50.4
47.5°	53.8	55.8	71.1	42.2	42.3	74.5	50.2	47.2	44.2
50°	47.8	50.9	54.1	35.6	38.6	66.7	47.0	41.0	37.0
52.5°	41.8	45.1	47.3	35.8	35.1	53.4	42.3	34.0	30.2
55°	35.7	38.4	42.6	38.2	30.7	41.0	35.6	27.5	24.4
57.5°	30.4	32.4	37.1	37.4	26.0	30.4	29.5	22.5	20.2
60°	26.4	27.7	31.3	33.1	22.4	24.2	24.1	18.8	18.7
62.5°	23.0	24.1	25.8	28.0	19.3	21.1	18.9	17.5	18.2
65°	19.7	20.2	21.5	21.8	16.4	17.9	15.4	16.7	17.3
67.5°	16.3	17.1	18.2	17.3	14.6	15.2	13.5	15.4	15.8
70°	13.9	13.9	14.9	14.9	15.1	12.3	12.5	13.4	13.4
72.5°	11.7	11.5	12.1	12.3	12.8	12.7	11.2	11.0	11.1
75°	11.7	14.3	12.6	10.5	13.2	13.1	13.9	13.7	13.6
77.5°	15.8	12.9	12.1	10.9	11.9	11.2	11.2	10.7	10.9
80°	13.8	11.5	10.7	8.8	10.5	9.1	8.5	8.2	8.4
82.5°	11.7	9.7	9.1	6.8	8.0	6.4	6.0	5.8	5.7
85°	9.4	8.1	7.1	5.0	5.2	4.1	3.7	3.4	3.2
87.5°	7.2	6.0	5.3	3.1	2.6	2.0	1.5	1.3	0.9
90°	5.4	4.6	3.9	2.1	1.6	1.2	0.8	0.4	0.3

(END OF REPORT)