

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: E395637

Luminaire Tested: **H-2573-P (UPPER HEMISPHERE)**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: E395637  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H-2573-P (UPPER HEMISPHERE)  
Description: HALO CASCADE 1  
Light Source: 100W.A19 1750 LUMENS  
Ballast/Driver: -

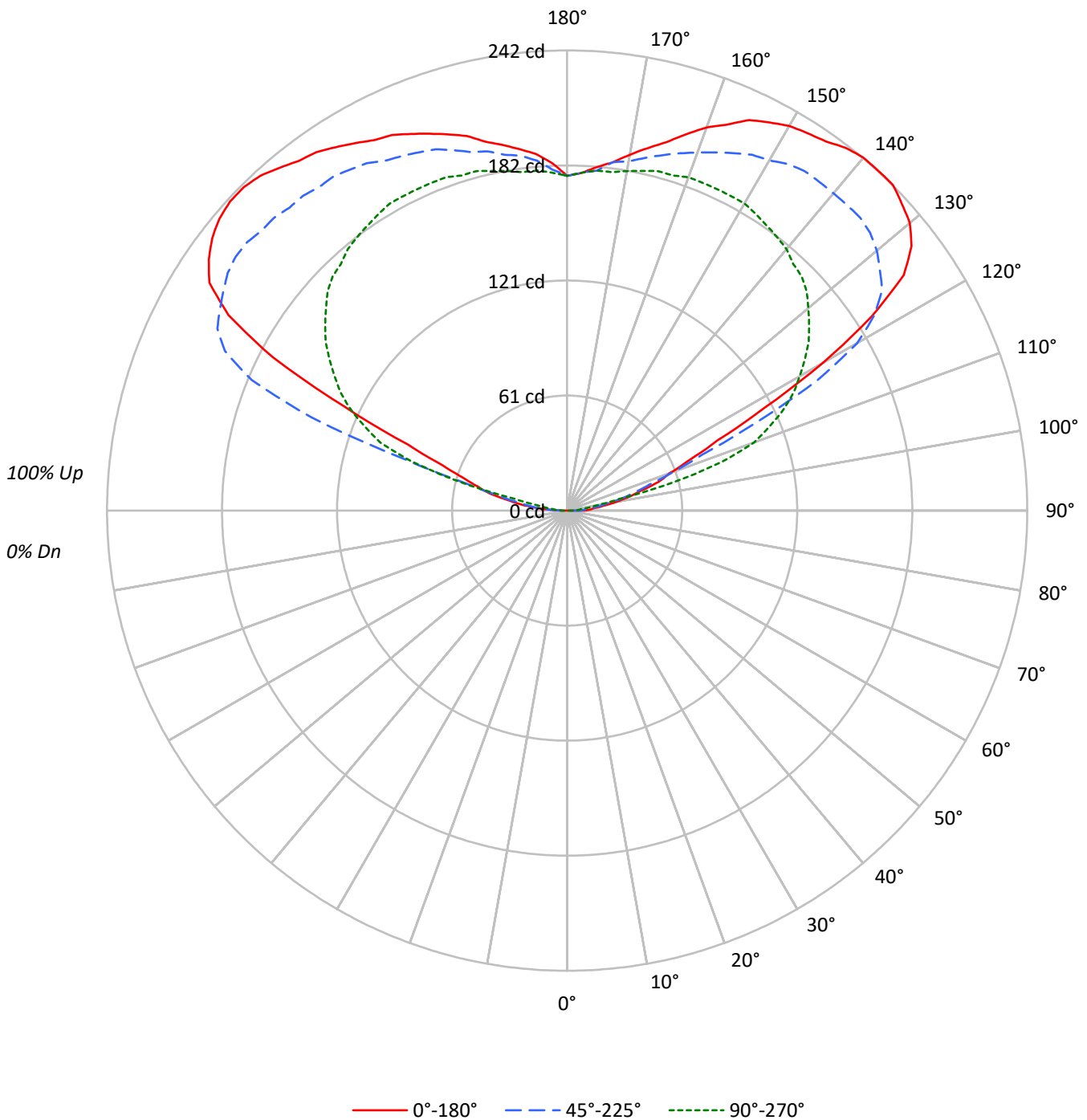
**Summary**

Lumens per Lamp: 1750 (1 lamp)  
Luminaire Lumens: 845.8 lumens  
Efficiency: 48.3%  
Efficacy: 8.5 lumens/watt  
N/A  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Indirect

Input Watts (W): 100  
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	50	30	10	50	30	10	0																			
RCR																																														
0	46	46	46	46	39	39	39	39	27	27	27	15	15	15	5	5	5	0																												
1	42	40	38	37	36	34	33	32	23	23	22	13	13	13	4	4	4	0																												
2	38	35	32	30	32	30	28	26	20	19	18	12	11	11	4	4	3	0																												
3	35	31	27	25	29	26	24	21	18	16	15	10	10	9	3	3	3	0																												
4	32	27	23	21	27	23	20	18	16	14	13	9	8	8	3	3	2	0																												
5	29	24	20	18	25	20	17	15	14	12	11	8	7	6	3	2	2	0																												
6	26	21	18	15	23	18	15	13	13	11	9	7	6	6	2	2	2	0																												
7	24	19	15	13	21	16	13	11	11	9	8	7	6	5	2	2	2	0																												
8	22	17	14	11	19	15	12	10	10	8	7	6	5	4	2	2	1	0																												
9	21	15	12	10	18	13	11	9	9	7	6	5	4	4	2	1	1	0																												
10	19	14	11	9	16	12	9	8	8	7	5	5	4	3	2	1	1	0																												

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

	0°	90°	180°
95°	1717	865	1939
100°	1618	973	1946
105°	1668	2466	2030
110°	1810	3292	2194
115°	2221	3196	3286
120°	3339	3040	4428
125°	4055	2911	4318
130°	3940	2773	3999
135°	3688	2653	3661
140°	3405	2522	3306
145°	3114	2405	3024
150°	2903	2318	2773
155°	2691	2215	2588
160°	2456	2136	2416
165°	2233	2059	2272
170°	2077	1982	2134
175°	1959	1940	2034



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.0	0.0	0.0
20°-30°	0.0	0.0	0.0
30°-40°	0.0	0.0	0.0
40°-50°	0.0	0.0	0.0
50°-60°	0.0	0.0	0.0
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	14.0	1.6	0.8
100°-110°	58.0	6.9	3.3
110°-120°	133.0	15.7	7.6
120°-130°	176.1	20.8	10.1
130°-140°	164.0	19.4	9.4
140°-150°	132.9	15.7	7.6
150°-160°	95.1	11.2	5.4
160°-170°	55.1	6.5	3.2
170°-180°	17.5	2.1	1.0
0°-30°	0.0	0.0	0.0
0°-40°	0.0	0.0	0.0
0°-60°	0.0	0.0	0.0
0°-90°	0.0	0.0	0.0
90°-120°	204.9	24.2	11.7
90°-150°	678.0	80.2	38.7
90°-180°	846.0	100.0	48.3
0°-180°	845.8	100.0	48.3

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
90°	9	7	2	0	2	
95°	14	12	7	16	16	17
105°	40	37	59	54	49	44
115°	87	110	126	199	129	94
125°	216	202	155	218	230	185
135°	242	218	174	218	240	186
145°	237	218	183	214	230	149
155°	227	207	186	206	218	104
165°	200	194	185	195	204	57
175°	181	180	180	185	188	18
180°	176	176	176	176	176	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	8.7	8.7	7.0	5.2	1.7	1.7	0.0	0.0	1.7
92.5°	12.2	12.2	8.7	7.0	5.2	5.2	8.7	8.7	7.0
95°	13.9	12.2	12.2	8.7	7.0	8.7	15.7	15.7	15.7
97.5°	19.2	17.4	15.7	12.2	10.5	15.7	20.9	22.7	24.4
100°	26.1	24.4	20.9	17.4	15.7	29.6	27.9	31.4	31.4
102.5°	33.1	33.1	29.6	24.4	27.9	73.2	38.3	38.3	41.8
105°	40.1	41.8	36.6	33.1	59.3	118.5	54.0	45.3	48.8
107.5°	50.5	48.8	45.3	48.8	85.4	139.4	88.9	55.8	57.5
110°	57.5	57.5	59.3	76.7	104.6	149.9	142.9	71.5	69.7
112.5°	69.7	71.5	76.7	106.3	115.0	158.6	179.5	102.8	90.6
115°	87.2	90.6	109.8	129.0	125.5	165.6	198.7	149.9	129.0
117.5°	116.8	129.0	148.2	144.7	134.2	170.8	207.4	188.2	174.3
120°	155.1	163.8	176.0	155.1	141.2	176.0	210.9	209.2	205.7
122.5°	190.0	197.0	191.7	163.8	148.2	181.3	214.4	219.6	223.1
125°	216.1	212.6	202.2	170.8	155.1	184.8	217.9	226.6	230.1
127.5°	228.3	223.1	207.4	176.0	160.4	188.2	219.6	230.1	235.3
130°	235.3	230.1	212.6	179.5	165.6	190.0	219.6	231.8	238.8
132.5°	238.8	233.6	216.1	183.0	170.8	193.5	217.9	233.6	240.5
135°	242.3	235.3	217.9	186.5	174.3	195.2	217.9	233.6	240.5
137.5°	242.3	237.0	217.9	188.2	176.0	195.2	216.1	231.8	238.8
140°	242.3	237.0	217.9	190.0	179.5	197.0	216.1	228.3	235.3
142.5°	240.5	235.3	217.9	190.0	181.3	197.0	214.4	226.6	231.8
145°	237.0	231.8	217.9	191.7	183.0	198.7	214.4	223.1	230.1
147.5°	235.3	230.1	216.1	191.7	184.8	197.0	212.6	221.4	226.6
150°	233.6	228.3	212.6	193.5	186.5	197.0	210.9	219.6	223.1
152.5°	230.1	224.8	210.9	193.5	186.5	197.0	207.4	216.1	219.6
155°	226.6	221.4	207.4	191.7	186.5	195.2	205.7	212.6	217.9
157.5°	219.6	216.1	203.9	191.7	186.5	193.5	203.9	210.9	214.4
160°	214.4	209.2	200.4	190.0	186.5	191.7	202.2	207.4	210.9
162.5°	207.4	203.9	197.0	188.2	184.8	191.7	198.7	203.9	207.4
165°	200.4	198.7	193.5	186.5	184.8	190.0	195.2	200.4	203.9
167.5°	195.2	193.5	190.0	184.8	183.0	188.2	193.5	197.0	198.7
170°	190.0	190.0	186.5	183.0	181.3	186.5	190.0	193.5	195.2
172.5°	184.8	184.8	184.8	181.3	179.5	183.0	188.2	190.0	191.7
175°	181.3	181.3	179.5	179.5	179.5	179.5	184.8	186.5	188.2
177.5°	177.8	177.8	177.8	176.0	177.8	177.8	179.5	179.5	183.0
180°	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0	176.0

(END OF REPORT)