

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: FAIL-SAFE

Report Number: 6585.1

Luminaire Tested: **HUD100S**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6585.1
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: HUD100S
Description: FAIL-SAFE 1x1 surface mount fixture
drop dish prismatic lens
Light Source: 100 watt hps 9500 LUMENS
Ballast/Driver: -

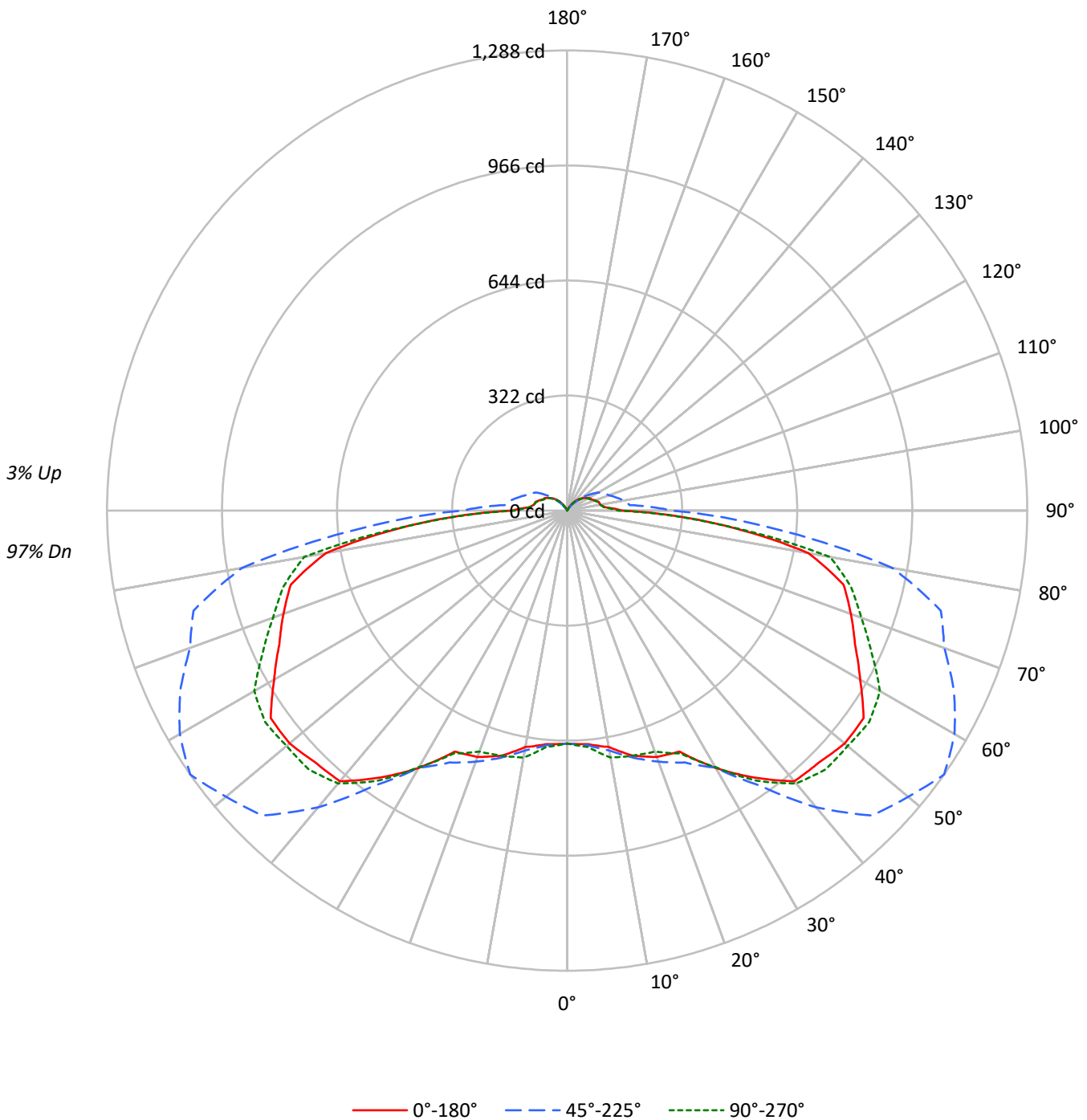
Summary

Lumens per Lamp: 9500 (1 lamp)
Luminaire Lumens: 14013.4 lumens
Efficiency: 147.5%
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 2.11 / 2.14 / 2.4
Luminous Opening: Rectangular w/ Sides (W: 0.81' x L: 0.81' x H: 4.12')
CIE Type: Direct

Input Watts (W): 110
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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	174	174	174	174	170	170	170	170	161	161	161	153	153	153	146	146	146	143		
1	163	157	152	147	158	153	149	145	146	143	139	140	137	134	134	131	129	126		
2	153	144	137	130	149	141	134	129	135	130	125	130	126	122	125	122	118	115		
3	145	135	126	119	142	132	124	118	127	121	115	123	118	113	119	114	111	108		
4	139	127	118	112	136	125	117	111	121	114	109	118	112	107	114	109	105	103		
5	134	121	113	106	131	120	112	105	117	109	104	114	107	103	111	106	101	99		
6	130	117	108	102	127	115	107	102	113	106	100	110	104	99	108	103	98	96		
7	126	113	105	99	124	112	104	99	110	103	98	108	101	97	106	100	96	94		
8	123	110	102	97	121	109	102	96	107	100	96	105	99	95	104	98	94	93		
9	120	107	100	95	118	107	99	95	105	99	94	103	98	94	102	97	93	91		
10	117	105	98	93	116	105	98	93	103	97	93	102	96	92	101	95	92	90		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10631	10631	10631
5°	7435	6625	7525
10°	5871	4983	6133
15°	5078	4134	5078
20°	4472	3592	4375
25°	3975	3219	4007
30°	3985	3041	3970
35°	3985	3101	4033
40°	4002	3285	4034
45°	3783	3403	3886
50°	3648	3307	3688
55°	3490	3253	3556
60°	3153	3039	3366
65°	2885	2812	3051
70°	2695	2583	2794
75°	2530	2455	2596
80°	2162	2080	2354
85°	1328	1309	1312



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	7939.6	56.7	83.6	0°	652	652	652	652	652	
10°-20°	204.7	1.5	2.2	5°	656	660694	659	671	664	63
20°-30°	369.7	2.6	3.9	15°	710	750	716	704	710	201
30°-40°	607.3	4.3	6.4	25°	744	847	778	774	750	354
40°-50°	859.7	6.1	9.0	35°	912	1071	939	946	923	574
50°-60°	1027.9	7.3	10.8	45°	997	1168	1207	1068	1024	774
60°-70°	1058.9	7.6	11.1	55°	1013	1162	1288	1152	1032	894
70°-80°	979.2	7.0	10.3	65°	889	1061	1195	1105	940	885
80°-90°	505.0	3.6	5.3	75°	801	925	1083	999	822	828
90°-100°	162.4	1.2	1.7	85°	419	215	581	537	414	397
100°-110°	118.6	0.8	1.2	90°	153	151	293	193	143	114
110°-120°	87.4	0.6	0.9	95°	107	135	176	131	103	92
120°-130°	56.0	0.4	0.6	105°	92	109	142	106	91	96
130°-140°	28.3	0.2	0.3	115°	74	80	113	85	73	75
140°-150°	8.3	0.1	0.1	125°	61	49	79	59	61	55
150°-160°	0.4	0.0	0.0	135°	44	27	38	38	40	34
160°-170°	0.0	0.0	0.0	145°	22	5	5	16	20	14
170°-180°	0.0	0.0	0.0	155°	1	0	0	0	0	1
0°-30°	8514.0	60.8	89.6	165°	0	0	0	0	0	0
0°-40°	9121.4	65.1	96.0	175°	0	0	0	0	0	0
0°-60°	11009.0	78.6	115.9	180°	0	0	0	0	0	
0°-90°	13552.1	96.7	142.7							
90°-120°	368.3	2.6	3.9							
90°-150°	460.9	3.3	4.9							
90°-180°	461.0	3.3	4.9							
0°-180°	14013.4	100.0	147.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	652	652	652	652	652
5°	656	660694	659	671	664
10°	672	718	682	672	702
15°	710	750	716	704	710
20°	734	787	748	736	718
25°	744	847	778	774	750
30°	832	948	831	840	829
35°	912	1071	939	946	923
40°	989	1117	1084	1030	997
45°	997	1168	1207	1068	1024
50°	1014	1214	1246	1134	1025
55°	1013	1162	1288	1152	1032
60°	947	1116	1252	1126	1011
65°	889	1061	1195	1105	940
70°	845	1043	1123	1027	876
75°	801	925	1083	999	822
80°	686	573	924	917	747
85°	419	215	581	537	414
90°	153	151	293	193	143
95°	107	135	176	131	103
100°	94	125	161	121	94
105°	92	109	142	106	91
110°	83	93	125	94	81
115°	74	80	113	85	73
120°	71	68	101	71	68
125°	61	49	79	59	61
130°	53	34	58	46	51
135°	44	27	38	38	40
140°	33	17	23	27	33
145°	22	5	5	16	20
150°	10	0	0	4	5
155°	1	0	0	0	0
160°	0	0	0	0	0
165°	0	0	0	0	0
170°	0	0	0	0	0
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)