

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: 6583.0

Luminaire Tested: **HUD150S**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 6583.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: HUD150S
Description: FAIL-SAFE 1x1 SURFACE MOUNT FIXTURE
DROPPED PRISMATIC LENS
VR=1.2

Light Source: S55LU150/MED 150 WATT HPS
Ballast/Driver: -

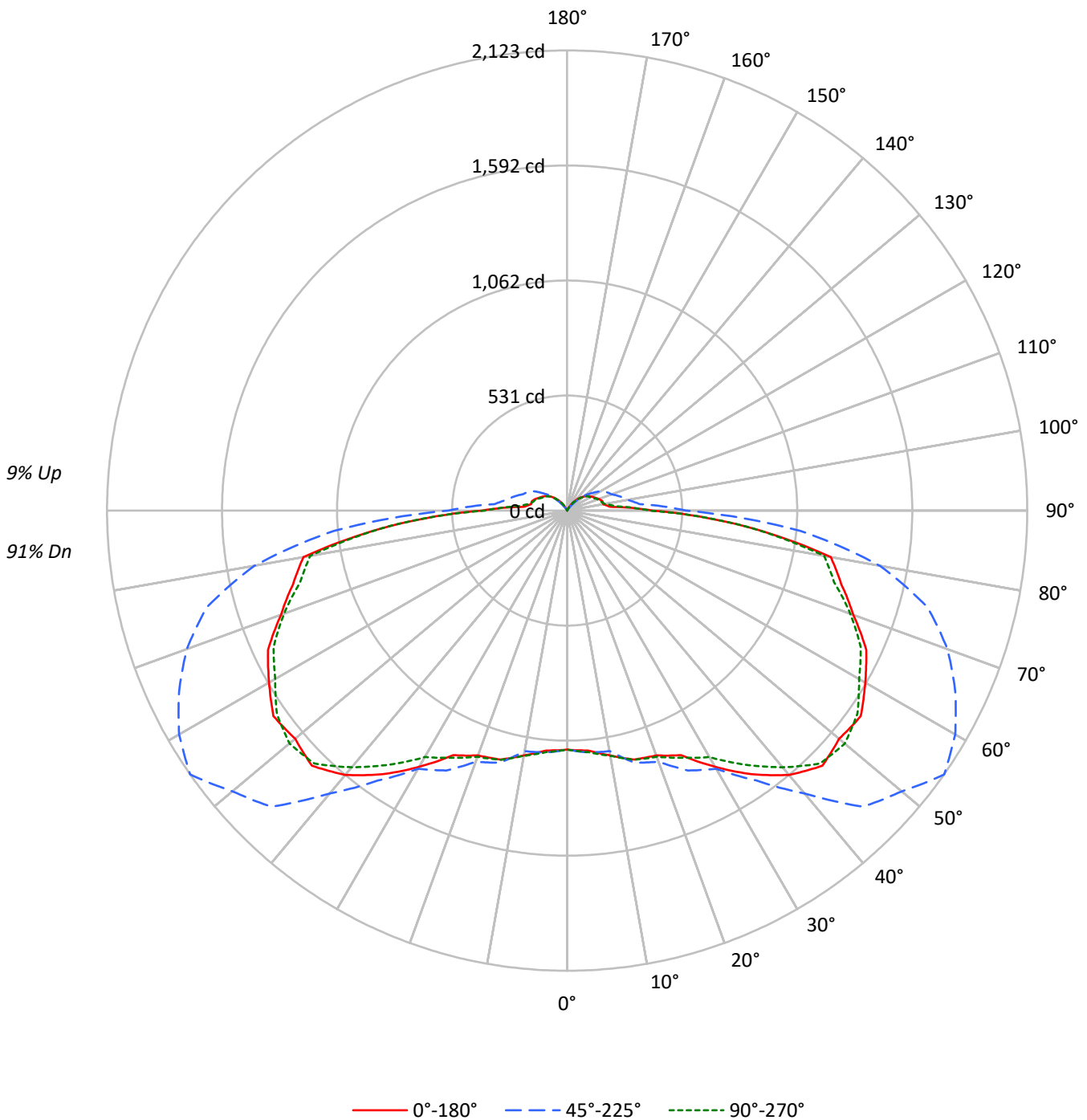
Summary

Lumens per Lamp: 16000 (1 lamp)
Luminaire Lumens: 10479.2 lumens
Efficiency: 65.5%
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 2.08 / 2.08 / 2.37
Luminous Opening: Rectangular w/ Sides (W: 0.9' x L: 0.9' x H: 0.38')
CIE Type: Direct

Input Watts (W): 150
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	50	30	10	0	
RCR																						
0	77	77	77	77	74	74	74	74	70	70	70	65	65	65	62	62	62	60				60
1	66	61	57	53	63	59	55	52	55	52	49	51	49	46	48	46	44	42				42
2	58	51	45	39	56	49	43	39	45	41	37	42	38	35	39	36	33	31				31
3	52	43	36	30	49	41	35	30	38	33	28	36	31	27	33	29	26	24				24
4	47	37	30	24	44	36	29	24	33	27	23	31	26	22	28	24	21	19				19
5	42	32	25	20	40	31	24	19	29	23	19	27	22	18	25	21	17	15				15
6	39	28	22	17	37	27	21	16	26	20	16	24	19	15	22	18	14	13				13
7	36	25	19	14	34	25	18	14	23	17	13	21	16	13	20	16	12	11				11
8	33	23	17	12	31	22	16	12	21	15	12	19	15	11	18	14	11	9				9
9	31	21	15	11	29	20	14	10	19	14	10	18	13	10	17	12	9	8				8
10	29	19	13	9	27	18	13	9	17	12	9	16	12	9	15	11	8	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14789	14789	14789
5°	14425	14332	14529
10°	14543	13894	14568
15°	14840	14425	14852
20°	14883	14474	14970
25°	15411	15339	15572
30°	17020	15866	16372
35°	18797	17589	18114
40°	20622	19916	20026
45°	22256	23013	22055
50°	22796	24646	23269
55°	24199	26893	23921
60°	24687	27369	24174
65°	25463	27625	24995
70°	25619	27869	25345
75°	26468	27783	25781
80°	28266	25963	27556
85°	21757	21396	21837



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	107.2	1.0	0.7	0°	1103	1103	1103	1103	1103	
10°-20°	336.9	3.2	2.1	5°	1111	1089	1120	1115	1119	107
20°-30°	597.4	5.7	3.7	15°	1189	1185	1204	1185	1190	336
30°-40°	943.5	9.0	5.9	25°	1245	1282	1323	1287	1258	587
40°-50°	1364.9	13.0	8.5	35°	1485	1462	1520	1499	1431	933
50°-60°	1675.9	16.0	10.5	45°	1665	1754	1932	1743	1650	1270
60°-70°	1749.6	16.7	10.9	55°	1654	1946	2123	1874	1635	1465
70°-80°	1671.5	16.0	10.4	65°	1523	1825	1976	1762	1495	1498
80°-90°	1105.2	10.5	6.9	75°	1309	1685	1721	1684	1275	1390
90°-100°	353.6	3.4	2.2	85°	818	1139	1080	1148	821	753
100°-110°	220.5	2.1	1.4	90°	393	569	548	544	380	247
110°-120°	164.0	1.6	1.0	95°	198	276	336	283	224	190
120°-130°	110.7	1.1	0.7	105°	168	210	252	208	161	175
130°-140°	57.9	0.6	0.4	115°	141	160	201	158	136	141
140°-150°	18.8	0.2	0.1	125°	118	118	141	118	115	105
150°-160°	1.5	0.0	0.0	135°	82	72	72	69	78	64
160°-170°	0.0	0.0	0.0	145°	40	30	12	29	38	26
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	1	2
0°-30°	1041.5	9.9	6.5	165°	0	0	0	0	0	0
0°-40°	1985.0	18.9	12.4	175°	0	0	0	0	0	0
0°-60°	5025.8	48.0	31.4	180°	0	0	0	0	0	0
0°-90°	9552.1	91.2	59.7							
90°-120°	738.1	7.0	4.6							
90°-150°	925.6	8.8	5.8							
90°-180°	927.0	8.8	5.8							
0°-180°	10479.2	100.0	65.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1103	1103	1103	1103	1103
5°	1111	1089	1120	1115	1119
10°	1147	1152	1127	1167	1149
15°	1189	1185	1204	1185	1190
20°	1202	1192	1233	1222	1209
25°	1245	1282	1323	1287	1258
30°	1365	1386	1375	1355	1313
35°	1485	1462	1520	1499	1431
40°	1592	1658	1703	1694	1546
45°	1665	1754	1932	1743	1650
50°	1638	1845	2015	1854	1672
55°	1654	1946	2123	1874	1635
60°	1588	1858	2067	1848	1555
65°	1523	1825	1976	1762	1495
70°	1405	1725	1867	1737	1390
75°	1309	1685	1721	1684	1275
80°	1235	1537	1465	1579	1204
85°	818	1139	1080	1148	821
90°	393	569	548	544	380
95°	198	276	336	283	224
100°	169	225	284	240	175
105°	168	210	252	208	161
110°	156	187	219	183	152
115°	141	160	201	158	136
120°	129	141	178	138	123
125°	118	118	141	118	115
130°	101	95	110	94	100
135°	82	72	72	69	78
140°	62	53	39	50	57
145°	40	30	12	29	38
150°	19	14	0	15	19
155°	0	0	0	0	1
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)