

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: P20475

Luminaire Tested: **FUSLP-X12-4-5000-7-50-UNV-80/84-ED**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P20475
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSLP-X12-4-5000-7-50-UNV-80/84-ED
Description: FAIL SAFE CONFINEMENT/CORRECTIONAL SURRFACE MOUNT LED
DOWNLIGHT FIXTURE WITH POLYCARBONATE SECURITY LENS
Light Source: (14)5000K SMT LEDS
(4) 2FT LED BARS
Ballast/Driver: MAGTEK ELECTRONIC DRIVER
LP1020

Summary

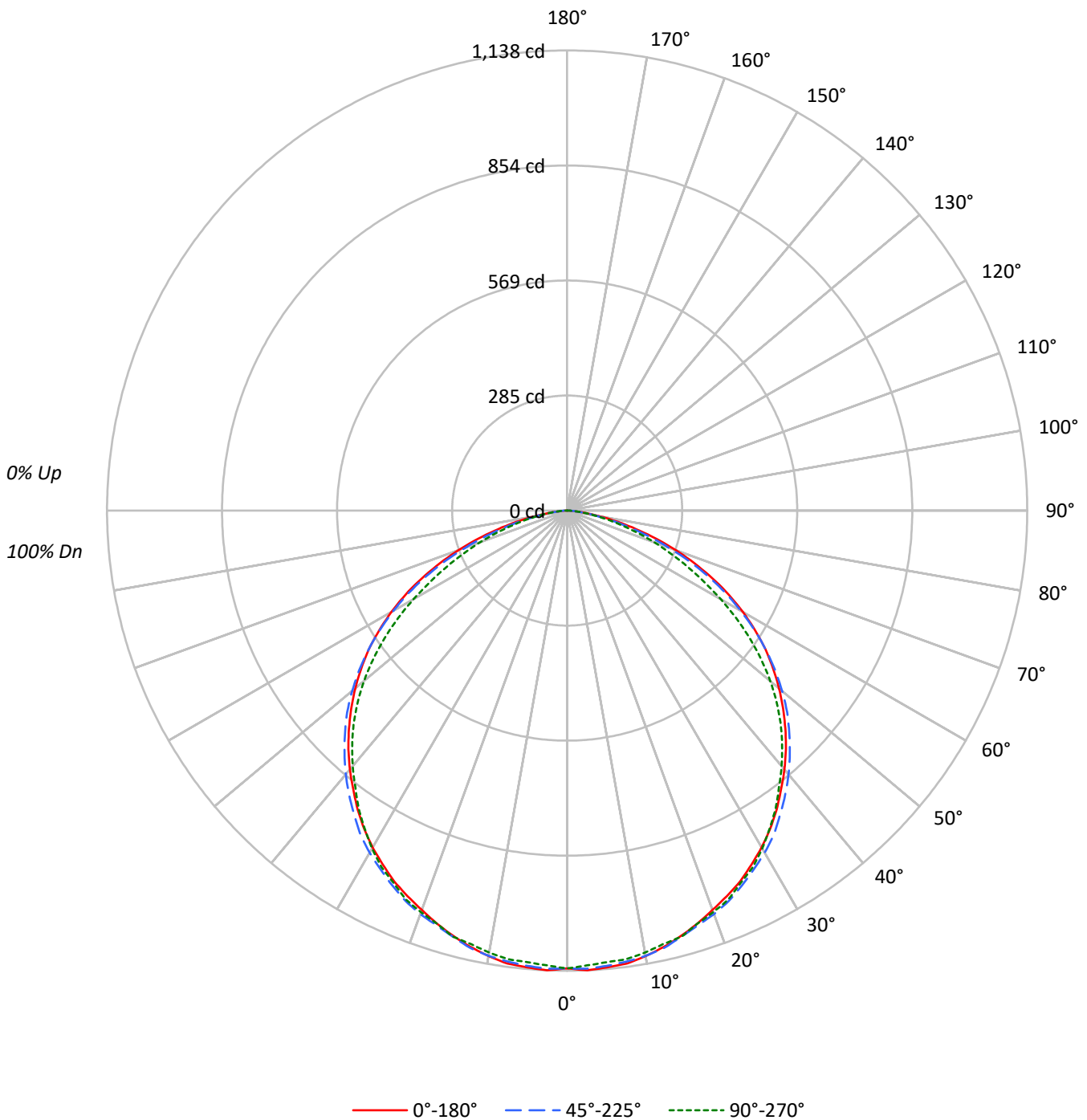
Lumens per Lamp: N/A
Luminaire Lumens: 3126.3 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 69.1
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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60					60			
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52					52			
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39					39			
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7311	7311	7311
5°	7352	7326	7267
10°	7338	7332	7279
15°	7281	7295	7295
20°	7223	7299	7265
25°	7212	7290	7240
30°	7174	7286	7196
35°	7119	7238	7088
40°	7048	7183	6955
45°	6969	7097	6823
50°	6872	6973	6591
55°	6745	6756	6215
60°	6484	6407	5670
65°	6052	5883	5012
70°	5382	5042	4324
75°	4392	3918	3468
80°	3087	2641	2529
85°	1556	1556	1704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	3.4
10°-20°	306.9	9.8
20°-30°	468.3	15.0
30°-40°	567.2	18.1
40°-50°	588.6	18.8
50°-60°	522.4	16.7
60°-70°	366.5	11.7
70°-80°	168.8	5.4
80°-90°	30.4	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	882.4	28.2
0°-40°	1449.7	46.4
0°-60°	2560.7	81.9
0°-90°	3126.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3126.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1132	1132	1132	1132	1132	
5°	1134	1121	1130	1127	1121	108
15°	1089	1078	1091	1090	1091	307
25°	1012	1007	1023	1020	1016	466
35°	903	902	918	906	899	565
45°	763	765	777	758	747	589
55°	599	595	600	575	552	533
65°	396	388	385	348	328	391
75°	176	167	157	145	139	189
85°	21	21	21	23	23	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1132	1132	1132	1132	1132
2.5°	1138	1125	1134	1130	1126
5°	1134	1121	1130	1127	1121
7.5°	1130	1117	1125	1123	1119
10°	1119	1107	1118	1115	1110
12.5°	1105	1093	1108	1099	1098
15°	1089	1078	1091	1090	1091
17.5°	1071	1063	1075	1076	1071
20°	1051	1048	1062	1056	1057
22.5°	1032	1029	1045	1041	1041
25°	1012	1007	1023	1020	1016
27.5°	987	985	1000	994	994
30°	962	958	977	972	965
32.5°	934	930	951	941	932
35°	903	902	918	906	899
37.5°	869	870	886	873	861
40°	836	836	852	834	825
42.5°	801	802	815	798	787
45°	763	765	777	758	747
47.5°	724	725	738	717	703
50°	684	684	694	673	656
52.5°	642	641	648	626	605
55°	599	595	600	575	552
57.5°	551	546	549	521	496
60°	502	496	496	465	439
62.5°	451	443	442	406	382
65°	396	388	385	348	328
67.5°	341	331	326	291	277
70°	285	275	267	238	229
72.5°	230	219	210	190	182
75°	176	167	157	145	139
77.5°	127	119	110	104	101
80°	83	78	71	70	68
82.5°	46	45	41	42	42
85°	21	21	21	23	23
87.5°	6	8	11	12	13
90°	0	0	0	0	0

(END OF REPORT)