

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:

Luminaire Tested: **CFSLP24-332-120-IK12**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number:
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CFSLP24-332-120-IK12
Description:
Light Source: FO32T8
Ballast/Driver: -

Summary

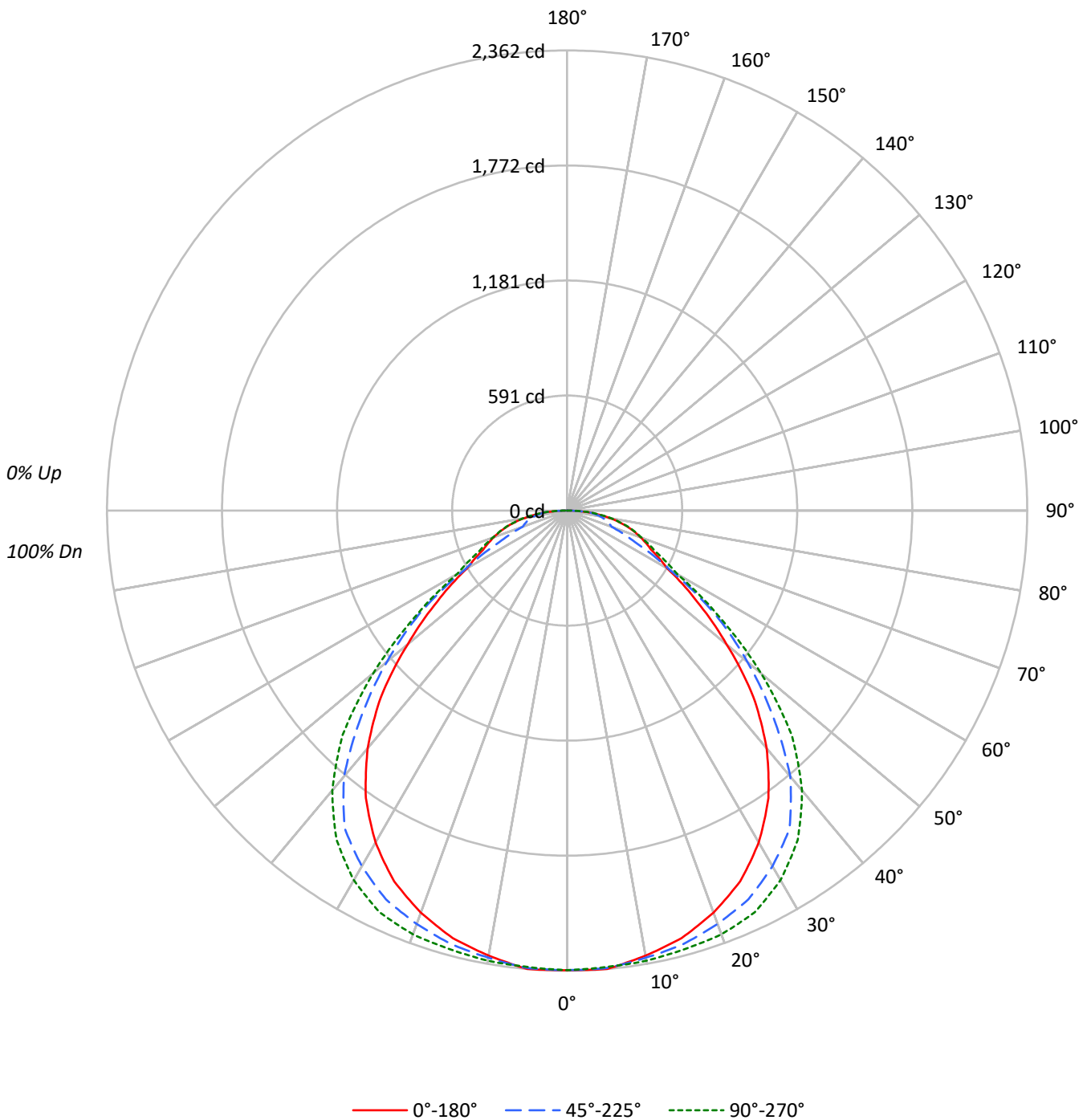
Lumens per Lamp: 2900 (3 lamps)
Luminaire Lumens: 5886.8 lumens
Efficiency: 67.7%
Efficacy: 49.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.36 / 1.36
Luminous Opening: Rectangular (W 1.75' x L: 3.75' x H: 0')
CIE Type: Direct

Input Watts (W): 120
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	0
RCR																		
0	81	81	81	81	79	79	79	79	75	75	75	72	72	72	69	69	69	68
1	74	71	69	66	72	70	67	65	67	65	63	64	63	61	62	61	59	58
2	68	63	59	55	66	62	58	54	59	56	53	57	54	52	55	53	51	49
3	63	56	51	47	61	55	50	46	53	49	46	51	48	45	49	47	44	43
4	58	50	45	40	56	49	44	40	48	43	39	46	42	39	45	41	38	37
5	53	45	39	35	52	44	39	35	43	38	35	42	37	34	40	37	34	32
6	49	41	35	31	48	40	35	31	39	34	31	38	34	30	37	33	30	29
7	46	37	31	28	45	37	31	27	36	31	27	35	30	27	34	30	27	26
8	43	34	28	25	42	34	28	25	33	28	24	32	27	24	31	27	24	23
9	40	31	26	22	39	31	26	22	30	25	22	29	25	22	29	25	22	21
10	38	29	24	20	37	29	24	20	28	23	20	27	23	20	27	23	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3869	3869	3869
5°	3888	3881	3872
10°	3863	3881	3907
15°	3857	3912	3957
20°	3833	3941	4040
25°	3801	3984	4119
30°	3725	3992	4149
35°	3607	3986	4132
40°	3410	3816	4017
45°	3135	3466	3781
50°	2728	3082	3315
55°	2323	2652	2736
60°	1947	1998	2140
65°	1846	1493	1949
70°	1924	1165	1946
75°	2035	1352	2064
80°	2121	1643	2172
85°	2217	2268	2407



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	224.0	3.8	2.6	0°	2359	2359	2359	2359	2359	
10°-20°	650.1	11.0	7.5	5°	2362	2359	2357	2357	2352	224
20°-30°	1009.1	17.1	11.6	15°	2272	2276	2304	2322	2330	641
30°-40°	1215.1	20.6	14.0	25°	2100	2135	2202	2253	2276	965
40°-50°	1139.1	19.4	13.1	35°	1801	1862	1991	2042	2064	1121
50°-60°	810.0	13.8	9.3	45°	1352	1385	1494	1563	1630	1034
60°-70°	451.6	7.7	5.2	55°	812	857	927	962	957	734
70°-80°	271.5	4.6	3.1	65°	476	428	385	452	502	482
80°-90°	116.1	2.0	1.3	75°	321	243	213	246	326	335
90°-100°	0.0	0.0	0.0	85°	118	112	120	118	128	125
100°-110°	0.0	0.0	0.0	90°	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°	1883.2	32.0	21.6							
0°-40°	3098.4	52.6	35.6							
0°-60°	5047.5	85.7	58.0							
0°-90°	5886.8	100.0	67.7							
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°	5886.8	100.0	67.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2358.9	2358.9	2358.9	2358.9	2358.9
5°	2361.6	2358.9	2357.0	2357.0	2351.5
10°	2319.3	2316.6	2330.4	2337.7	2346.0
15°	2271.5	2276.1	2303.7	2322.1	2330.4
20°	2196.0	2212.6	2257.7	2292.6	2314.7
25°	2100.4	2135.3	2201.6	2253.1	2276.1
30°	1967.0	2014.8	2107.7	2167.5	2190.5
35°	1801.4	1862.1	1990.9	2041.5	2063.6
40°	1592.5	1654.2	1782.0	1840.9	1875.9
45°	1351.5	1384.6	1494.1	1563.1	1630.2
50°	1069.0	1103.1	1208.0	1261.3	1299.0
55°	812.4	857.4	927.4	962.3	956.8
60°	593.4	606.3	609.0	656.9	652.3
65°	475.6	427.8	384.6	451.7	502.3
70°	401.1	325.7	242.9	331.2	405.7
75°	321.1	242.9	213.4	245.6	325.7
80°	224.5	176.6	173.9	181.2	230.0
85°	117.8	112.2	120.5	117.8	127.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)