

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: P309614

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-HRP-CP125-W2A-U-5500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P309614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-55HE-UNV-L82765-HRP-CP125-W2A-U-5500K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB SHEET
Light Source: (336) 5500K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3911.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

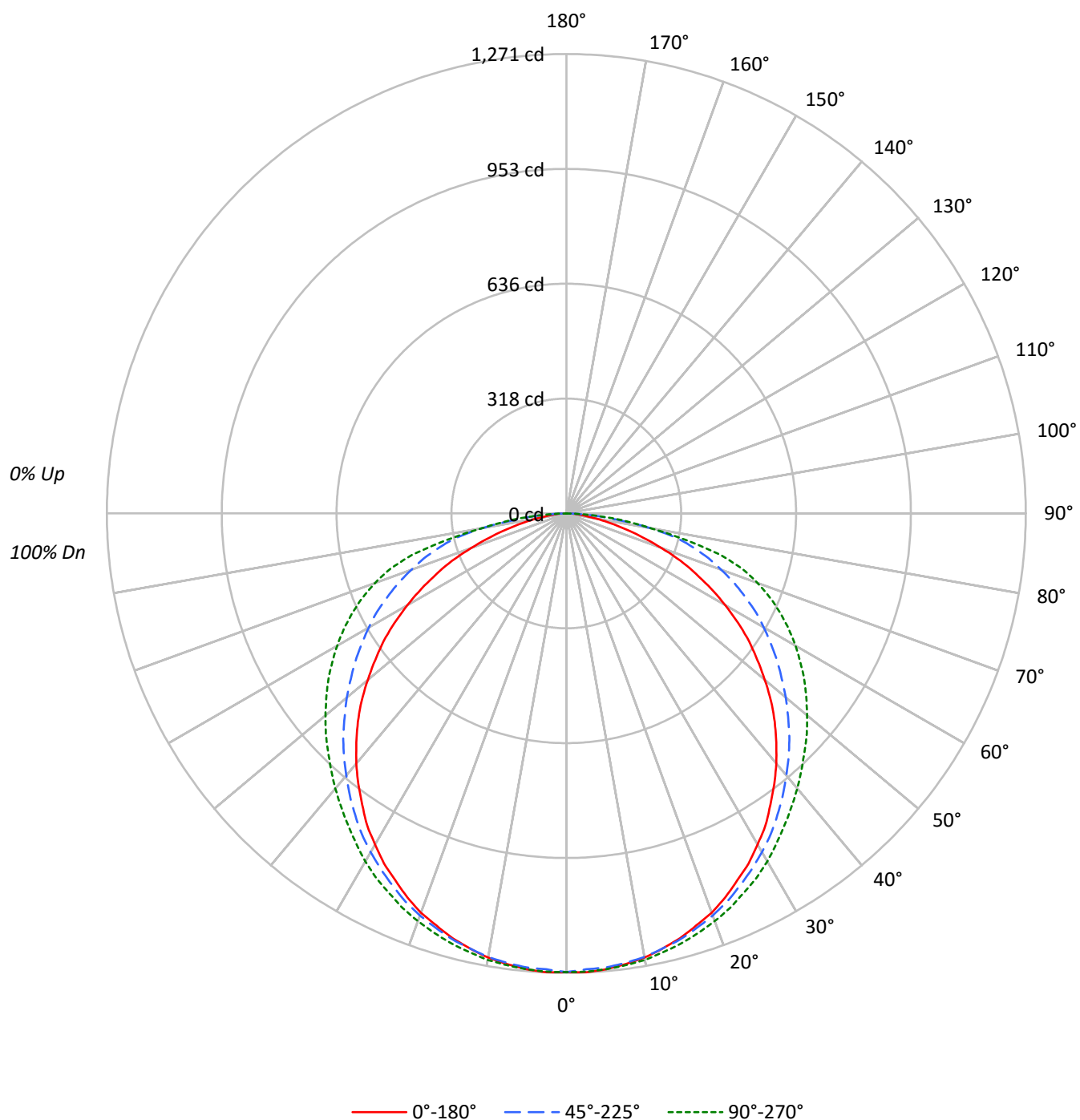
Input Watts (W): 44.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1707	1707	1707
5°	1709	1703	1709
10°	1705	1702	1714
15°	1695	1699	1715
20°	1683	1695	1718
25°	1663	1687	1721
30°	1643	1682	1727
35°	1616	1673	1729
40°	1587	1662	1746
45°	1552	1661	1773
50°	1501	1659	1820
55°	1448	1671	1886
60°	1366	1696	1970
65°	1261	1736	2080
70°	1102	1797	2216
75°	894	1890	2289
80°	659	1852	1852
85°	505	1365	1542



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	3.1
10°-20°	345.2	8.8
20°-30°	525.5	13.4
30°-40°	638.1	16.3
40°-50°	674.2	17.2
50°-60°	636.1	16.3
60°-70°	528.9	13.5
70°-80°	348.0	8.9
80°-90°	94.8	2.4
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°	990.9	25.3
0°-40°	1629.0	41.7
0°-60°	2939.3	75.2
0°-90°	3911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3911.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1266	1266	1261	1266	1266	120
15°	1216	1218	1220	1231	1231	343
25°	1120	1126	1136	1156	1159	517
35°	984	996	1018	1045	1053	616
45°	815	832	873	915	932	628
55°	617	644	712	779	804	550
65°	396	442	545	626	653	392
75°	172	250	364	431	440	185
85°	33	72	88	98	100	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1268.9	1268.9	1268.9	1268.9	1268.9
2.5°	1270.6	1268.9	1262.4	1268.9	1268.9
5°	1265.7	1265.7	1260.7	1265.7	1265.7
7.5°	1257.5	1257.5	1254.2	1260.7	1260.7
10°	1247.6	1247.6	1246.0	1254.2	1254.2
12.5°	1232.9	1234.5	1232.9	1242.7	1242.7
15°	1216.5	1218.2	1219.8	1231.3	1231.3
17.5°	1195.2	1198.5	1201.8	1214.9	1216.5
20°	1175.6	1177.2	1183.8	1198.5	1200.2
22.5°	1149.4	1154.3	1162.5	1177.2	1182.1
25°	1119.9	1126.5	1136.3	1156.0	1159.2
27.5°	1092.1	1097.0	1110.1	1131.4	1137.9
30°	1057.7	1065.9	1082.3	1103.6	1111.7
32.5°	1025.0	1033.2	1052.8	1075.7	1082.3
35°	984.0	995.5	1018.4	1044.6	1052.8
37.5°	944.7	956.2	984.0	1013.5	1023.3
40°	903.8	916.9	946.4	980.8	993.9
42.5°	859.6	877.6	910.4	948.0	962.7
45°	815.4	831.8	872.7	915.3	931.6
47.5°	767.9	787.6	831.8	882.5	902.2
50°	717.1	741.7	792.5	848.1	869.4
52.5°	666.4	694.2	751.5	813.8	836.7
55°	617.3	643.5	712.2	779.4	803.9
57.5°	563.2	596.0	671.3	743.3	767.9
60°	507.6	543.6	630.4	705.7	731.9
62.5°	451.9	492.8	591.1	666.4	694.2
65°	396.2	442.1	545.2	625.5	653.3
67.5°	342.2	393.0	502.7	582.9	610.7
70°	280.0	343.8	456.8	535.4	563.2
72.5°	222.7	296.4	412.6	486.3	510.8
75°	171.9	250.5	363.5	430.6	440.4
77.5°	126.1	204.7	312.7	335.7	337.3
80°	85.1	163.7	239.0	235.8	239.0
82.5°	55.7	122.8	150.6	168.6	170.3
85°	32.7	72.0	88.4	98.2	99.9
87.5°	16.4	24.6	31.1	32.7	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)