

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: METALUX

Report Number: P274817

Luminaire Tested: **24CZ2-55HE-RDP-UNV-L940-CD1-U**

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: P274817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-RDP-UNV-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (224) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3197.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

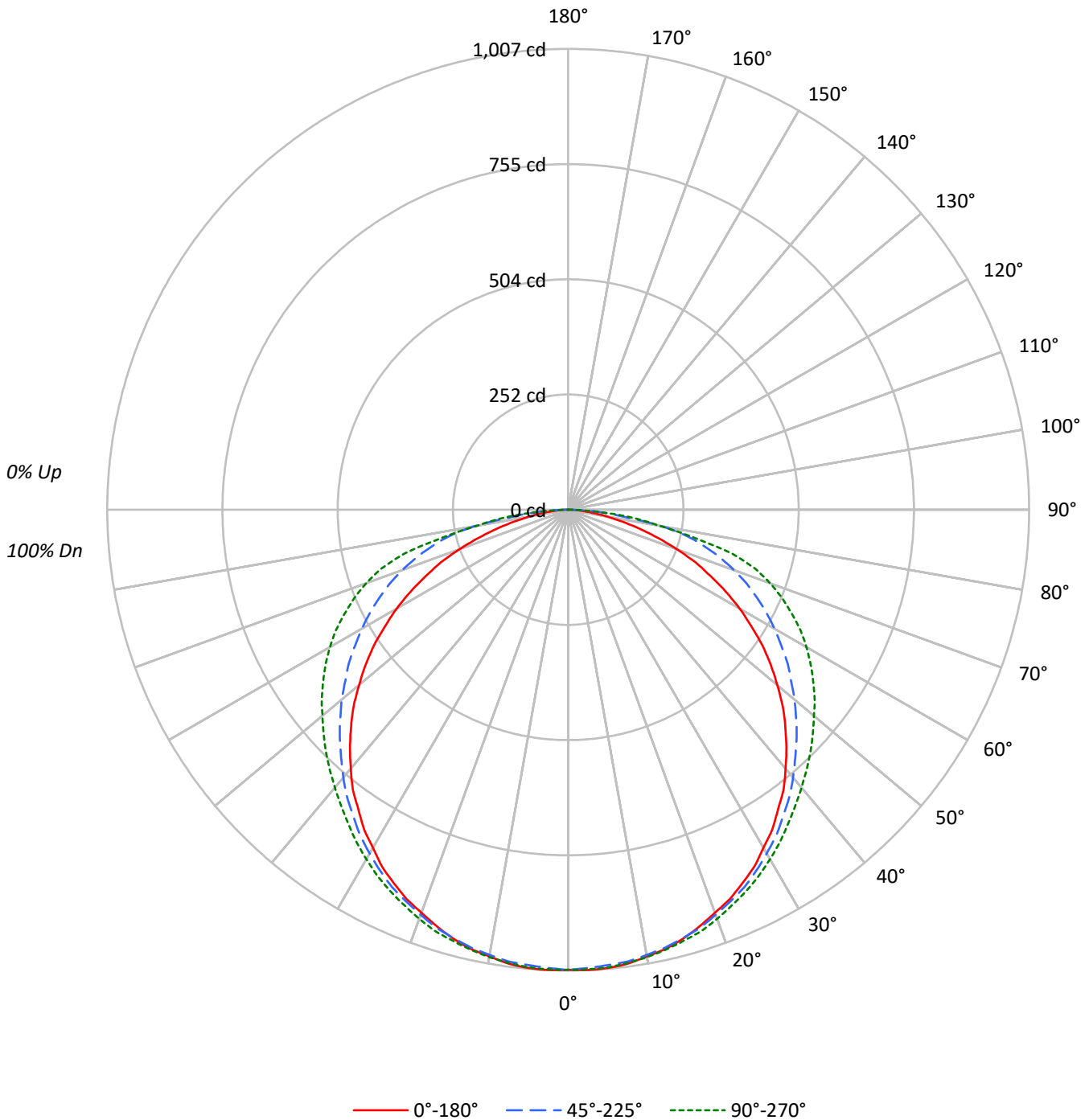
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1353	1353	1353
5°	1358	1349	1356
10°	1354	1350	1356
15°	1352	1350	1358
20°	1342	1349	1362
25°	1337	1351	1365
30°	1325	1348	1370
35°	1313	1344	1375
40°	1298	1342	1393
45°	1276	1343	1424
50°	1248	1351	1467
55°	1216	1373	1533
60°	1165	1400	1617
65°	1090	1449	1717
70°	992	1516	1847
75°	841	1599	1929
80°	663	1609	1561
85°	489	1224	1371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	3.0
10°-20°	274.5	8.6
20°-30°	419.7	13.1
30°-40°	513.1	16.0
40°-50°	546.9	17.1
50°-60°	522.9	16.4
60°-70°	442.9	13.9
70°-80°	297.7	9.3
80°-90°	84.0	2.6
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°	789.6	24.7
0°-40°	1302.7	40.7
0°-60°	2372.4	74.2
0°-90°	3197.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3197.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	1005	1004	999	1004	1004	96
15°	970	970	969	977	975	274
25°	901	904	910	918	920	415
35°	799	806	818	834	837	501
45°	671	682	706	736	748	517
55°	518	538	585	631	653	462
65°	342	377	455	515	539	340
75°	162	220	308	360	371	173
85°	32	65	79	86	89	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.4	1005.4	1005.4	1005.4	1005.4
2.5°	1007.0	1007.0	1002.2	1005.4	1005.4
5°	1005.4	1003.8	999.0	1003.8	1003.8
7.5°	1000.6	999.0	995.9	1000.6	999.0
10°	991.1	991.1	987.9	992.7	992.7
12.5°	983.2	981.6	980.0	986.3	984.8
15°	970.5	970.5	968.9	976.8	975.2
17.5°	954.6	956.2	957.8	964.1	965.7
20°	937.2	940.3	941.9	951.4	951.4
22.5°	921.3	922.9	926.1	935.6	935.6
25°	900.7	903.9	910.2	918.1	919.7
27.5°	880.1	881.7	889.6	900.7	902.3
30°	853.1	857.9	867.4	880.1	881.7
32.5°	829.3	834.1	845.2	857.9	861.1
35°	799.2	805.6	818.2	834.1	837.3
37.5°	772.3	777.0	792.9	810.3	815.1
40°	739.0	748.5	764.3	784.9	792.9
42.5°	705.7	715.2	734.2	761.2	770.7
45°	670.8	681.9	705.7	735.8	748.5
47.5°	635.9	648.6	675.5	710.4	724.7
50°	596.2	612.1	645.4	685.0	700.9
52.5°	558.2	577.2	613.7	658.1	678.7
55°	518.5	537.6	585.1	631.1	653.3
57.5°	474.1	499.5	551.8	604.2	628.0
60°	432.9	456.7	520.1	577.2	601.0
62.5°	388.5	420.2	488.4	548.7	572.5
65°	342.5	377.4	455.1	515.4	539.2
67.5°	301.3	339.4	421.8	482.1	505.9
70°	252.1	299.7	385.3	445.6	469.4
72.5°	206.1	258.5	347.3	406.0	428.2
75°	161.7	220.4	307.6	360.0	371.1
77.5°	120.5	182.4	266.4	288.6	280.7
80°	85.6	145.9	207.7	196.6	201.4
82.5°	55.5	111.0	128.4	145.9	150.6
85°	31.7	65.0	79.3	85.6	88.8
87.5°	14.3	23.8	31.7	31.7	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)