

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: P295081

Luminaire Tested: **24CZ2-75HE-HRP-UNV-L940-CD1-U**

Issue Date: 12/2/2019

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: P295081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-HRP-UNV-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (392) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5024.7 lumens
Efficiency: N/A
Efficacy: 90.7 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

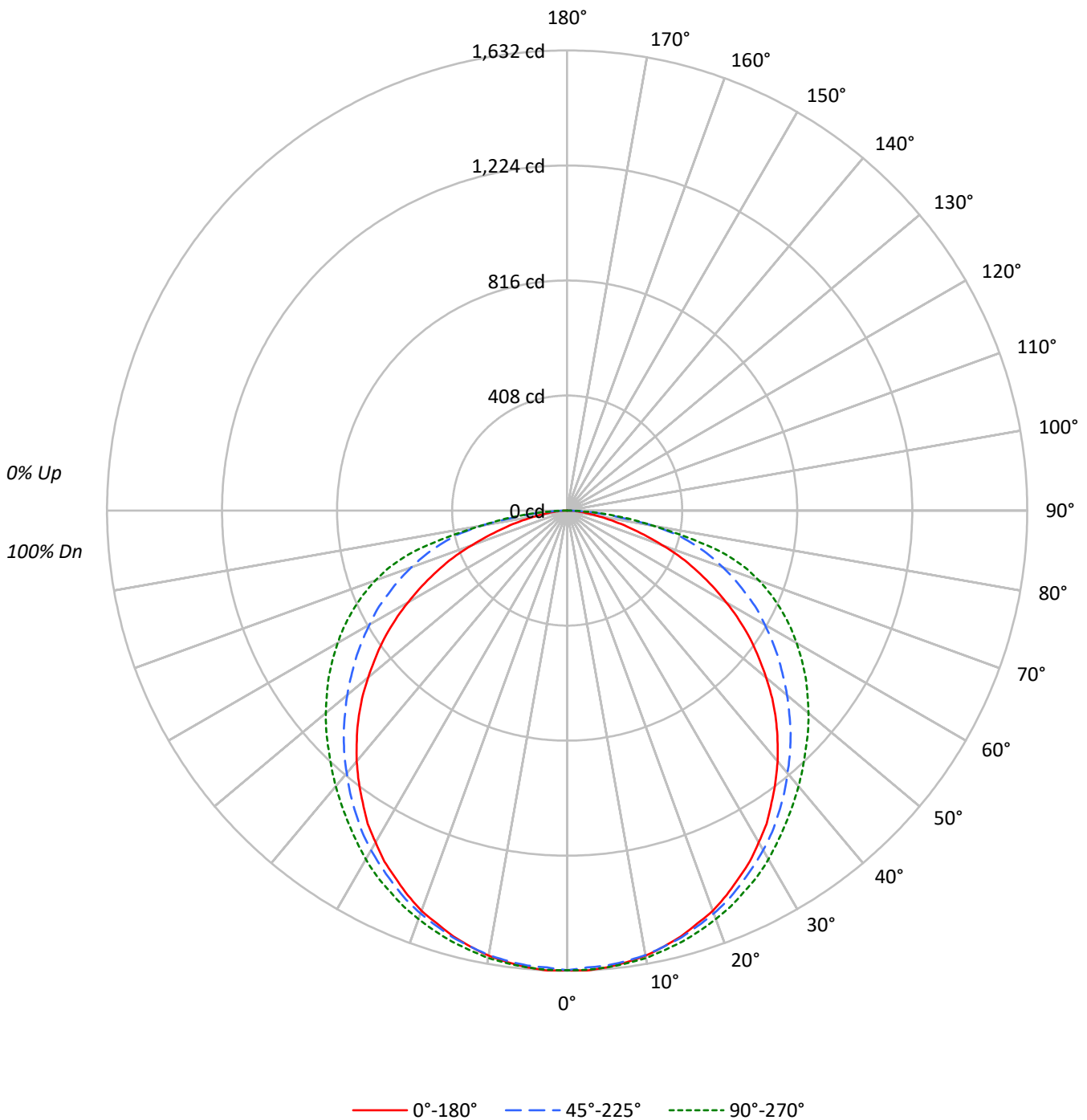
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2194	2194	2194
5°	2196	2188	2196
10°	2190	2187	2201
15°	2177	2183	2204
20°	2163	2178	2208
25°	2136	2167	2211
30°	2111	2160	2219
35°	2076	2149	2222
40°	2040	2136	2243
45°	1993	2133	2277
50°	1929	2131	2338
55°	1860	2146	2423
60°	1755	2179	2530
65°	1621	2230	2672
70°	1415	2309	2847
75°	1148	2428	2942
80°	848	2380	2380
85°	650	1754	1981



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.4	3.1
10°-20°	443.5	8.8
20°-30°	675.2	13.4
30°-40°	819.8	16.3
40°-50°	866.1	17.2
50°-60°	817.3	16.3
60°-70°	679.5	13.5
70°-80°	447.1	8.9
80°-90°	121.9	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°	1273.1	25.3
0°-40°	2092.9	41.7
0°-60°	3776.2	75.2
0°-90°	5024.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5024.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1630	1630	1630	1630	1630	
5°	1626	1626	1620	1626	1626	154
15°	1563	1565	1567	1582	1582	441
25°	1439	1447	1460	1485	1489	664
35°	1264	1279	1308	1342	1353	791
45°	1048	1069	1121	1176	1197	807
55°	793	827	915	1001	1033	706
65°	509	568	700	804	839	503
75°	221	322	467	553	566	238
85°	42	93	114	126	128	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1630.3	1630.3	1630.3	1630.3	1630.3
2.5°	1632.4	1630.3	1621.8	1630.3	1630.3
5°	1626.1	1626.1	1619.7	1626.1	1626.1
7.5°	1615.5	1615.5	1611.3	1619.7	1619.7
10°	1602.9	1602.9	1600.8	1611.3	1611.3
12.5°	1584.0	1586.1	1584.0	1596.6	1596.6
15°	1562.9	1565.0	1567.2	1581.9	1581.9
17.5°	1535.6	1539.8	1544.0	1560.8	1562.9
20°	1510.4	1512.5	1520.9	1539.8	1541.9
22.5°	1476.7	1483.0	1493.5	1512.5	1518.8
25°	1438.8	1447.3	1459.9	1485.1	1489.3
27.5°	1403.1	1409.4	1426.2	1453.6	1462.0
30°	1358.9	1369.4	1390.5	1417.8	1428.3
32.5°	1316.8	1327.3	1352.6	1382.0	1390.5
35°	1264.2	1279.0	1308.4	1342.1	1352.6
37.5°	1213.8	1228.5	1264.2	1302.1	1314.7
40°	1161.2	1178.0	1215.9	1260.0	1276.9
42.5°	1104.4	1127.5	1169.6	1218.0	1236.9
45°	1047.6	1068.6	1121.2	1175.9	1196.9
47.5°	986.6	1011.8	1068.6	1133.8	1159.1
50°	921.4	952.9	1018.1	1089.6	1117.0
52.5°	856.1	891.9	965.5	1045.5	1074.9
55°	793.0	826.7	915.0	1001.3	1032.8
57.5°	723.6	765.7	862.5	955.0	986.6
60°	652.1	698.4	809.9	906.6	940.3
62.5°	580.6	633.2	759.4	856.1	891.9
65°	509.1	568.0	700.5	803.6	839.3
67.5°	439.6	504.9	645.8	748.9	784.6
70°	359.7	441.7	586.9	687.9	723.6
72.5°	286.1	380.7	530.1	624.8	656.3
75°	220.9	321.8	467.0	553.2	565.9
77.5°	162.0	262.9	401.8	431.2	433.3
80°	109.4	210.4	307.1	302.9	307.1
82.5°	71.5	157.8	193.5	216.7	218.8
85°	42.1	92.6	113.6	126.2	128.3
87.5°	21.0	31.6	40.0	42.1	46.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)