

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: P272140

Luminaire Tested: **24CZ2-35-S-UNV-L950-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: P272140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-S-UNV-L950-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

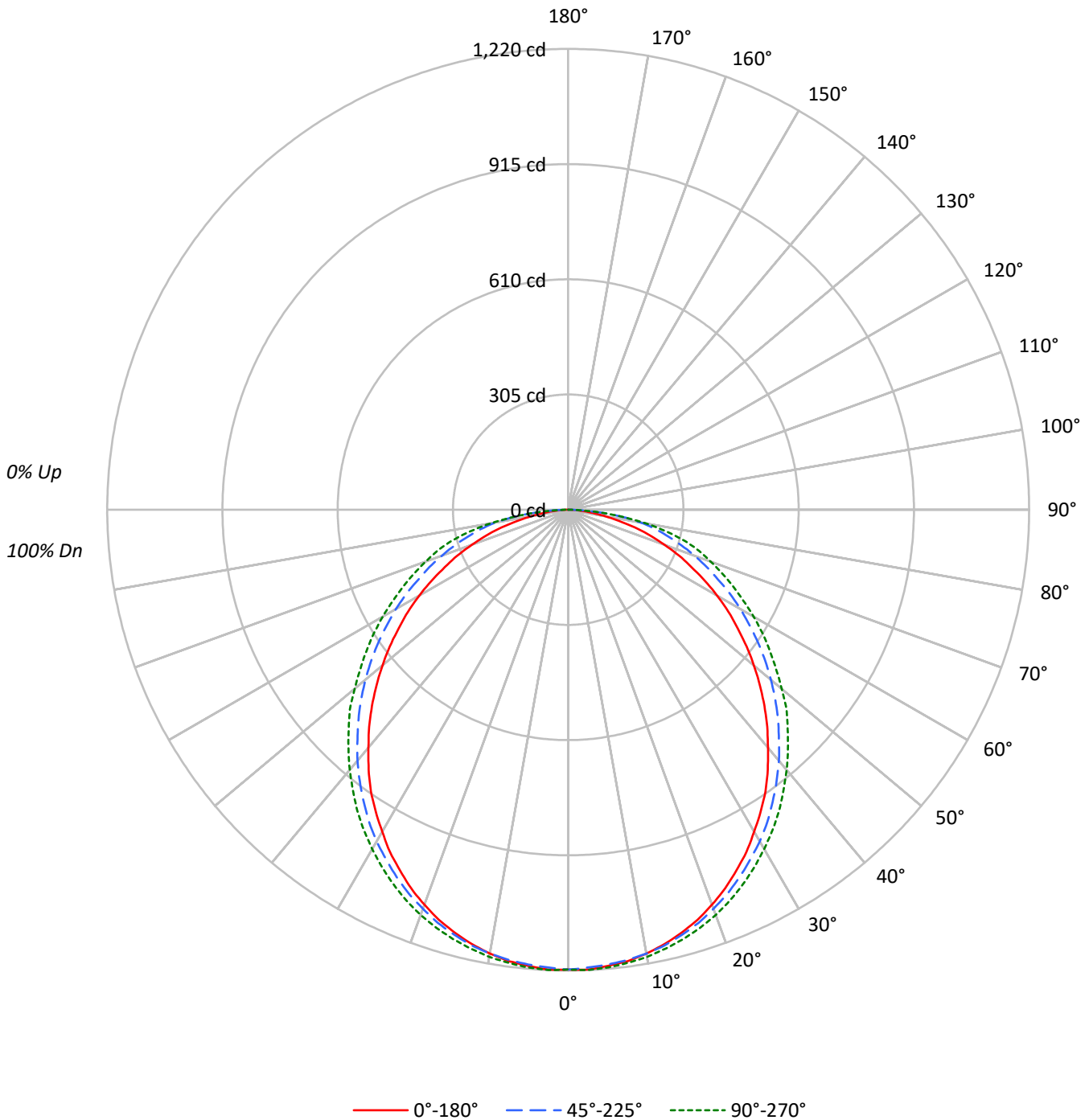
Lumens per Lamp: N/A
Luminaire Lumens: 3466.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.1
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1638	1638	1638
5°	1637	1633	1643
10°	1630	1630	1643
15°	1615	1623	1639
20°	1594	1609	1635
25°	1564	1594	1625
30°	1529	1575	1611
35°	1496	1550	1599
40°	1444	1524	1580
45°	1397	1494	1563
50°	1343	1466	1544
55°	1284	1438	1529
60°	1224	1416	1526
65°	1146	1392	1535
70°	1061	1399	1576
75°	950	1425	1666
80°	768	1510	1629
85°	577	1326	1292



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	3.3
10°-20°	329.4	9.5
20°-30°	495.1	14.3
30°-40°	589.8	17.0
40°-50°	603.6	17.4
50°-60°	543.4	15.7
60°-70°	426.8	12.3
70°-80°	277.0	8.0
80°-90°	85.7	2.5
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°	939.8	27.1
0°-40°	1529.6	44.1
0°-60°	2676.6	77.2
0°-90°	3466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1212	1214	1209	1215	1216	115
15°	1159	1163	1165	1175	1177	327
25°	1054	1062	1073	1091	1094	485
35°	910	922	944	967	973	568
45°	734	752	785	815	821	566
55°	547	571	613	645	652	491
65°	360	388	437	473	482	358
75°	183	218	274	312	320	193
85°	37	69	86	84	84	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.6	1217.6	1217.6	1217.6	1217.6
2.5°	1218.7	1218.7	1213.2	1218.7	1219.8
5°	1212.1	1214.3	1208.8	1215.4	1216.5
7.5°	1205.5	1205.5	1202.2	1208.8	1209.9
10°	1193.4	1194.5	1193.4	1201.1	1202.2
12.5°	1178.0	1180.2	1181.3	1189.0	1190.1
15°	1159.3	1162.6	1164.8	1174.7	1176.9
17.5°	1138.4	1141.7	1147.2	1158.2	1160.4
20°	1113.0	1117.4	1124.0	1138.4	1141.7
22.5°	1085.5	1089.9	1100.9	1114.1	1119.6
25°	1053.6	1062.4	1073.4	1091.0	1094.3
27.5°	1021.7	1029.4	1043.7	1062.4	1066.8
30°	984.2	996.3	1014.0	1032.7	1037.1
32.5°	947.9	960.0	980.9	1000.7	1006.2
35°	910.5	921.5	943.5	966.6	973.2
37.5°	867.5	881.8	906.1	929.2	935.8
40°	822.4	840.0	867.5	891.8	899.5
42.5°	779.5	798.2	825.7	852.1	860.9
45°	734.3	751.9	785.0	814.7	821.3
47.5°	688.1	707.9	743.1	772.9	783.9
50°	641.8	662.8	700.2	731.0	737.6
52.5°	595.6	617.6	657.3	690.3	693.6
55°	547.2	571.4	613.2	645.1	651.8
57.5°	503.1	524.0	569.2	602.2	609.9
60°	454.7	477.8	526.2	557.1	567.0
62.5°	408.4	432.7	483.3	514.1	522.9
65°	360.0	387.5	437.1	473.4	482.2
67.5°	318.2	344.6	397.4	432.7	441.5
70°	269.7	299.5	355.6	391.9	400.7
72.5°	227.9	258.7	314.9	350.1	363.3
75°	182.8	218.0	274.1	311.6	320.4
77.5°	138.7	179.5	236.7	265.3	265.3
80°	99.1	142.0	194.9	208.1	210.3
82.5°	65.0	106.8	144.2	143.1	143.1
85°	37.4	69.4	85.9	83.7	83.7
87.5°	14.3	28.6	30.8	30.8	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)