

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: P272137

Luminaire Tested: **24CZ2-35-S-UNV-L930-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: P272137
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-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

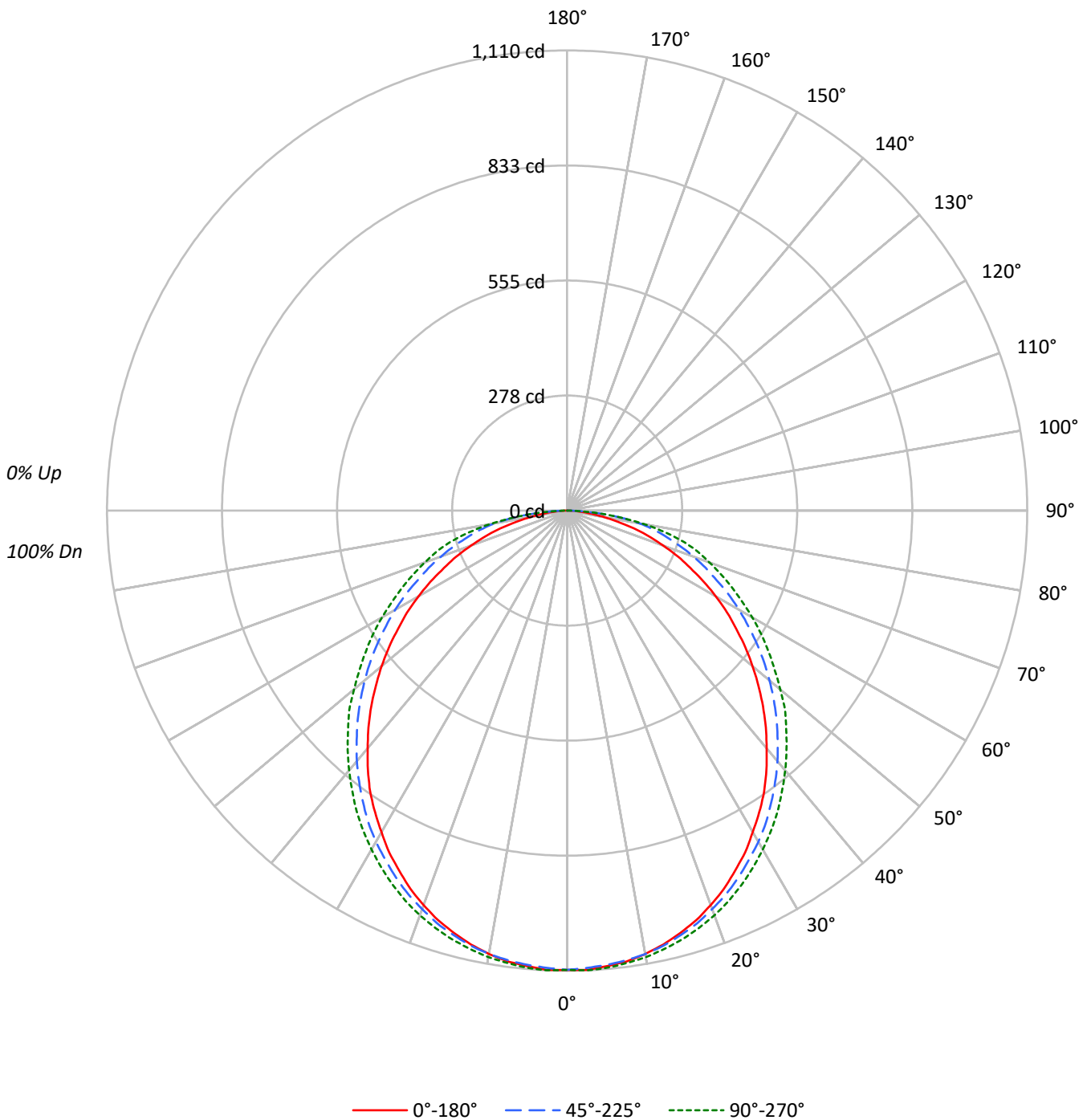
Lumens per Lamp: N/A
Luminaire Lumens: 3154.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1491	1491	1491
5°	1490	1486	1495
10°	1484	1484	1495
15°	1469	1476	1492
20°	1450	1465	1488
25°	1423	1450	1478
30°	1391	1434	1466
35°	1361	1410	1455
40°	1314	1387	1438
45°	1271	1359	1422
50°	1223	1334	1405
55°	1168	1309	1391
60°	1114	1289	1388
65°	1043	1266	1397
70°	965	1273	1435
75°	865	1297	1515
80°	699	1374	1482
85°	526	1206	1175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	3.3
10°-20°	299.7	9.5
20°-30°	450.6	14.3
30°-40°	536.7	17.0
40°-50°	549.3	17.4
50°-60°	494.5	15.7
60°-70°	388.4	12.3
70°-80°	252.0	8.0
80°-90°	77.9	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°	855.2	27.1
0°-40°	1391.9	44.1
0°-60°	2435.7	77.2
0°-90°	3154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3154.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1103	1105	1100	1106	1107	105
15°	1055	1058	1060	1069	1071	297
25°	959	967	977	993	996	442
35°	828	838	859	880	886	517
45°	668	684	714	741	747	515
55°	498	520	558	587	593	446
65°	328	353	398	431	439	326
75°	166	198	250	284	292	176
85°	34	63	78	76	76	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1108.0	1108.0	1108.0	1108.0	1108.0
2.5°	1109.0	1109.0	1104.0	1109.0	1110.0
5°	1103.0	1105.0	1100.0	1106.0	1107.0
7.5°	1097.0	1097.0	1094.0	1100.0	1101.0
10°	1086.0	1087.0	1086.0	1093.0	1094.0
12.5°	1072.0	1074.0	1075.0	1082.0	1083.0
15°	1054.9	1057.9	1059.9	1068.9	1071.0
17.5°	1035.9	1038.9	1043.9	1053.9	1055.9
20°	1012.8	1016.9	1022.9	1035.9	1038.9
22.5°	987.8	991.8	1001.8	1013.8	1018.9
25°	958.7	966.8	976.8	992.8	995.8
27.5°	929.7	936.7	949.7	966.8	970.8
30°	895.6	906.7	922.7	939.7	943.7
32.5°	862.6	873.6	892.6	910.7	915.7
35°	828.5	838.5	858.6	879.6	885.6
37.5°	789.4	802.5	824.5	845.5	851.6
40°	748.4	764.4	789.4	811.5	818.5
42.5°	709.3	726.3	751.4	775.4	783.4
45°	668.2	684.2	714.3	741.4	747.4
47.5°	626.1	644.2	676.2	703.3	713.3
50°	584.1	603.1	637.2	665.2	671.2
52.5°	542.0	562.0	598.1	628.1	631.2
55°	497.9	519.9	558.0	587.1	593.1
57.5°	457.8	476.9	517.9	548.0	555.0
60°	413.8	434.8	478.9	506.9	515.9
62.5°	371.7	393.7	439.8	467.9	475.9
65°	327.6	352.6	397.7	430.8	438.8
67.5°	289.5	313.6	361.7	393.7	401.7
70°	245.4	272.5	323.6	356.7	364.7
72.5°	207.4	235.4	286.5	318.6	330.6
75°	166.3	198.4	249.5	283.5	291.5
77.5°	126.2	163.3	215.4	241.4	241.4
80°	90.2	129.2	177.3	189.3	191.3
82.5°	59.1	97.2	131.2	130.2	130.2
85°	34.1	63.1	78.1	76.1	76.1
87.5°	13.0	26.0	28.1	28.1	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)