

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: P272138

Luminaire Tested: **24CZ2-35-S-UNV-L935-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: P272138
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-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

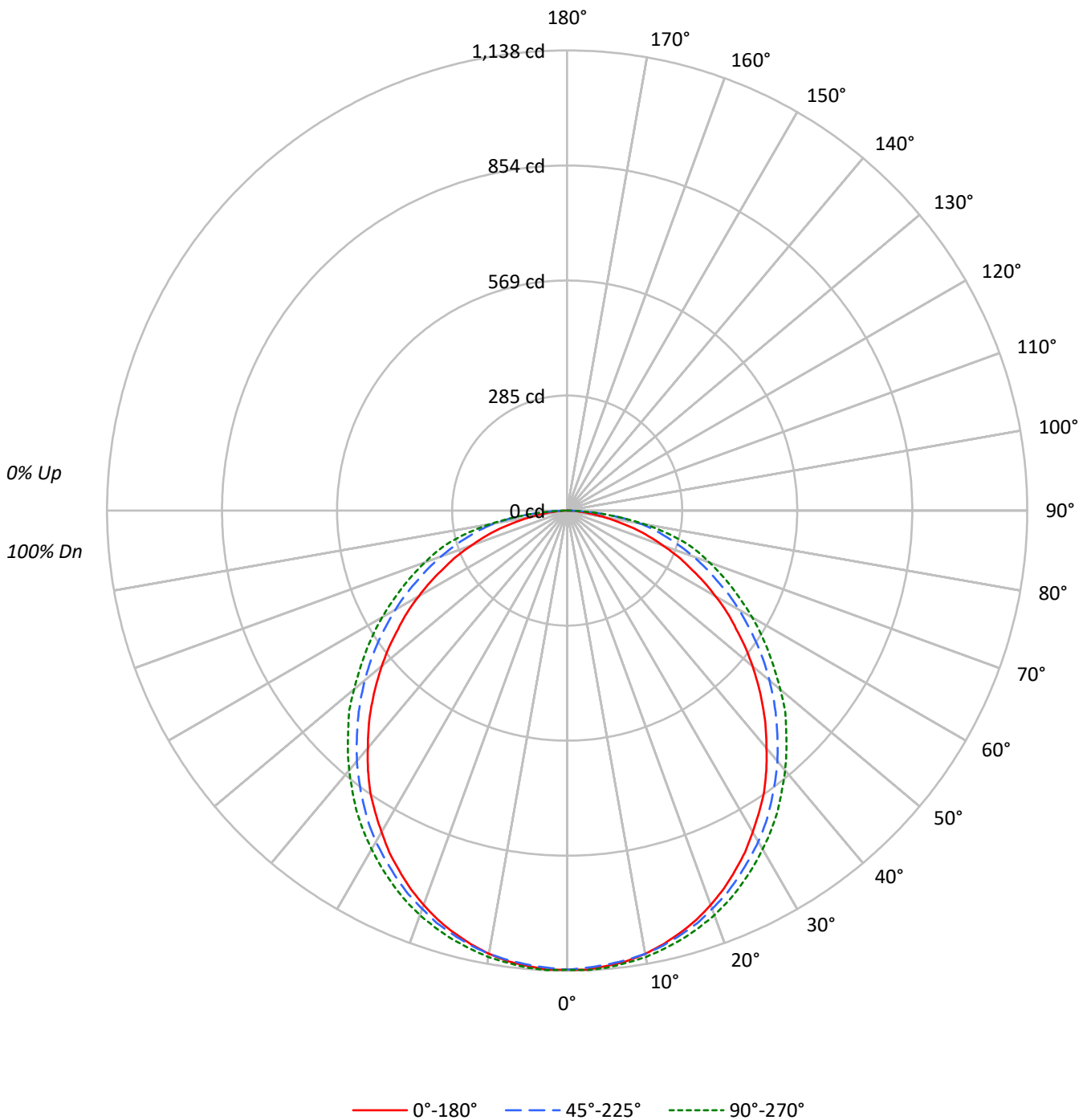
Lumens per Lamp: N/A
Luminaire Lumens: 3232.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1528	1528	1528
5°	1527	1522	1532
10°	1520	1520	1532
15°	1506	1513	1529
20°	1486	1501	1524
25°	1459	1486	1515
30°	1426	1469	1503
35°	1395	1445	1491
40°	1347	1421	1473
45°	1303	1393	1457
50°	1253	1367	1440
55°	1197	1341	1426
60°	1141	1320	1423
65°	1069	1298	1432
70°	989	1304	1470
75°	886	1329	1553
80°	716	1408	1519
85°	539	1237	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.5	3.3
10°-20°	307.1	9.5
20°-30°	461.7	14.3
30°-40°	550.0	17.0
40°-50°	562.9	17.4
50°-60°	506.7	15.7
60°-70°	398.0	12.3
70°-80°	258.3	8.0
80°-90°	79.9	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°	876.3	27.1
0°-40°	1426.3	44.1
0°-60°	2495.9	77.2
0°-90°	3232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1130	1132	1127	1133	1134	107
15°	1081	1084	1086	1095	1097	305
25°	982	991	1001	1017	1020	453
35°	849	859	880	901	908	530
45°	685	701	732	760	766	528
55°	510	533	572	602	608	457
65°	336	361	408	441	450	334
75°	170	203	256	290	299	180
85°	35	65	80	78	78	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.4	1135.4	1135.4	1135.4	1135.4
2.5°	1136.4	1136.4	1131.3	1136.4	1137.5
5°	1130.3	1132.3	1127.2	1133.4	1134.4
7.5°	1124.1	1124.1	1121.1	1127.2	1128.2
10°	1112.8	1113.9	1112.8	1120.0	1121.1
12.5°	1098.5	1100.5	1101.5	1108.7	1109.8
15°	1081.0	1084.1	1086.1	1095.4	1097.4
17.5°	1061.5	1064.6	1069.7	1080.0	1082.0
20°	1037.9	1042.0	1048.2	1061.5	1064.6
22.5°	1012.2	1016.3	1026.6	1038.9	1044.1
25°	982.5	990.7	1000.9	1017.4	1020.4
27.5°	952.7	959.9	973.2	990.7	994.8
30°	917.8	929.1	945.5	963.0	967.1
32.5°	883.9	895.2	914.7	933.2	938.3
35°	849.0	859.3	879.8	901.4	907.5
37.5°	809.0	822.3	844.9	866.5	872.6
40°	766.9	783.3	809.0	831.5	838.7
42.5°	726.8	744.3	770.0	794.6	802.8
45°	684.7	701.2	732.0	759.7	765.8
47.5°	641.6	660.1	693.0	720.7	730.9
50°	598.5	618.0	652.9	681.7	687.8
52.5°	555.4	575.9	612.9	643.7	646.8
55°	510.2	532.8	571.8	601.6	607.7
57.5°	469.2	488.7	530.8	561.6	568.7
60°	424.0	445.5	490.7	519.5	528.7
62.5°	380.9	403.5	450.7	479.4	487.6
65°	335.7	361.4	407.6	441.4	449.7
67.5°	296.7	321.3	370.6	403.5	411.7
70°	251.5	279.2	331.6	365.5	373.7
72.5°	212.5	241.3	293.6	326.5	338.8
75°	170.4	203.3	255.6	290.5	298.7
77.5°	129.4	167.3	220.7	247.4	247.4
80°	92.4	132.4	181.7	194.0	196.1
82.5°	60.6	99.6	134.5	133.5	133.5
85°	34.9	64.7	80.1	78.0	78.0
87.5°	13.3	26.7	28.7	28.7	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)