

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: P388594

Luminaire Tested: **24CZ2-35VHE-SQR-UNV-L950-CD1-SWPD1-U**

Issue Date: 2/28/2020

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: P388594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-SQR-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3032.3 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

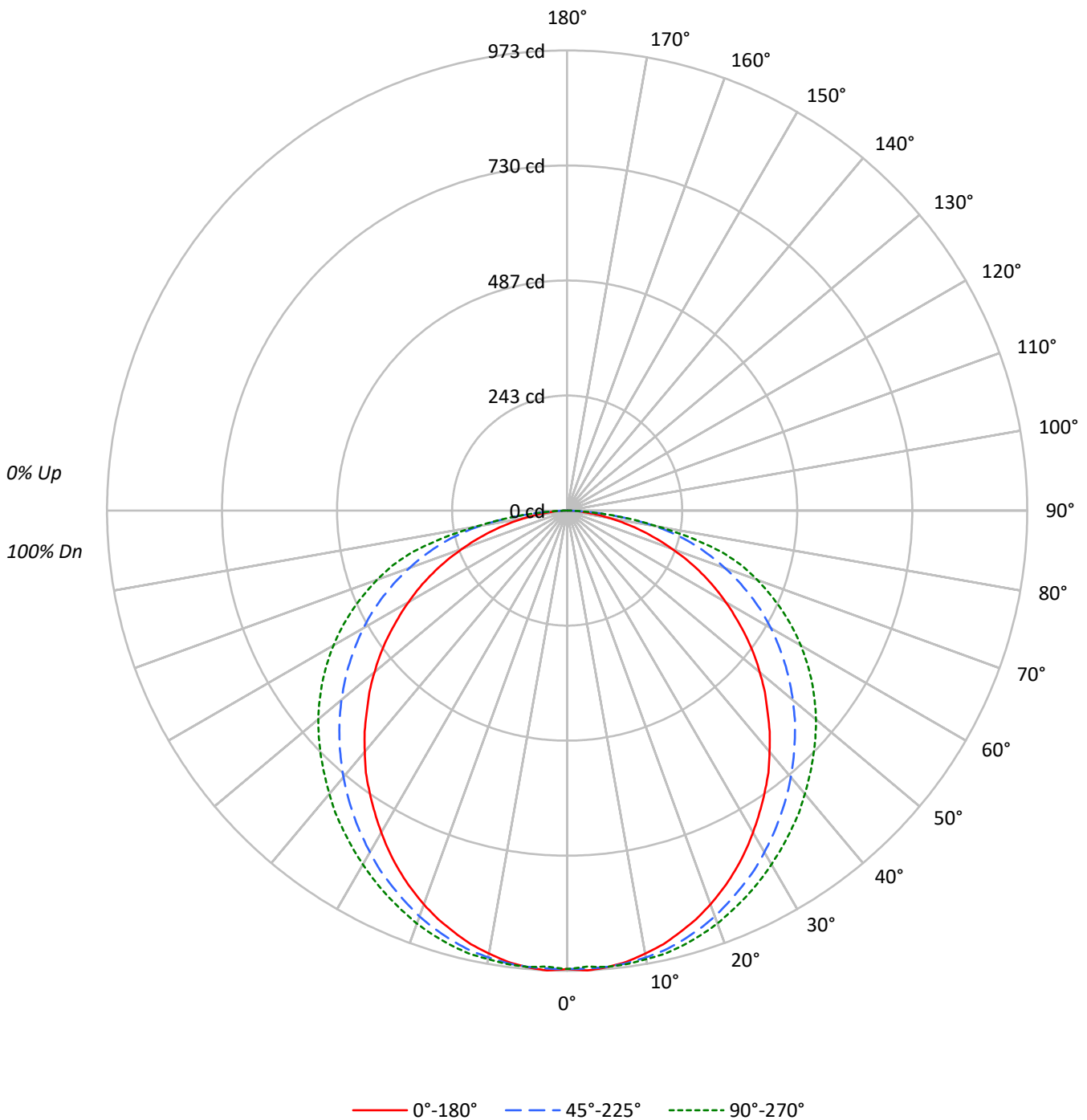
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1304	1304	1304
5°	1309	1308	1308
10°	1300	1311	1316
15°	1286	1311	1325
20°	1269	1308	1330
25°	1247	1301	1335
30°	1221	1296	1342
35°	1196	1293	1355
40°	1170	1293	1374
45°	1139	1296	1400
50°	1113	1304	1438
55°	1080	1318	1482
60°	1043	1339	1536
65°	998	1365	1600
70°	926	1399	1682
75°	838	1447	1759
80°	706	1450	1513
85°	540	1098	1098



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	3.0
10°-20°	264.7	8.7
20°-30°	402.1	13.3
30°-40°	489.1	16.1
40°-50°	520.7	17.2
50°-60°	496.0	16.4
60°-70°	414.8	13.7
70°-80°	276.5	9.1
80°-90°	76.5	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°	758.8	25.0
0°-40°	1247.9	41.2
0°-60°	2264.5	74.7
0°-90°	3032.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3032.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	969	969	969	969	969	
5°	969	963	968	968	968	92
15°	923	925	941	948	951	260
25°	840	851	876	891	899	387
35°	728	749	787	813	825	456
45°	599	631	681	719	736	463
55°	461	501	562	611	632	412
65°	313	360	429	482	503	310
75°	161	212	278	325	338	171
85°	35	65	71	70	71	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	969.3	969.3	969.3	969.3	969.3
2.5°	973.3	966.3	969.3	969.3	965.3
5°	969.3	963.3	968.3	968.3	968.3
7.5°	962.3	957.3	965.3	967.3	967.3
10°	951.2	949.2	959.3	962.3	963.3
12.5°	939.2	938.2	952.2	956.3	959.3
15°	923.2	925.2	941.2	948.2	951.2
17.5°	906.2	910.2	928.2	938.2	941.2
20°	886.2	892.2	913.2	923.2	929.2
22.5°	864.1	873.1	895.2	907.2	914.2
25°	840.1	851.1	876.1	891.2	899.2
27.5°	814.1	828.1	857.1	874.1	882.2
30°	786.0	802.1	834.1	854.1	864.1
32.5°	757.0	776.0	811.1	833.1	845.1
35°	728.0	749.0	787.0	813.1	825.1
37.5°	698.9	719.9	762.0	790.0	805.1
40°	665.9	690.9	736.0	767.0	782.0
42.5°	633.8	660.9	708.9	743.0	759.0
45°	598.8	630.8	680.9	718.9	736.0
47.5°	566.7	598.8	652.9	692.9	711.9
50°	531.7	565.7	622.8	666.9	686.9
52.5°	497.7	532.7	592.8	639.8	659.9
55°	460.6	500.7	561.7	610.8	631.8
57.5°	423.6	466.6	529.7	580.8	601.8
60°	387.5	431.6	497.7	548.7	570.7
62.5°	351.5	395.5	464.6	516.7	537.7
65°	313.4	359.5	428.6	481.6	502.7
67.5°	275.4	323.4	392.5	445.6	465.6
70°	235.3	286.4	355.5	407.5	427.6
72.5°	198.3	249.3	317.4	368.5	387.5
75°	161.2	212.3	278.4	325.4	338.4
77.5°	125.2	176.2	235.3	266.3	269.4
80°	91.1	139.2	187.2	196.3	195.3
82.5°	61.1	104.1	129.2	130.2	133.2
85°	35.0	65.1	71.1	70.1	71.1
87.5°	14.0	23.0	20.0	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)