

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: P388828

Luminaire Tested: **24CZ2-55-SQR-UNV-L935-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: P388828
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: 24CZ2-55-SQR-UNV-L935-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4467.4 lumens
Efficiency: N/A
Efficacy: 88.5 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

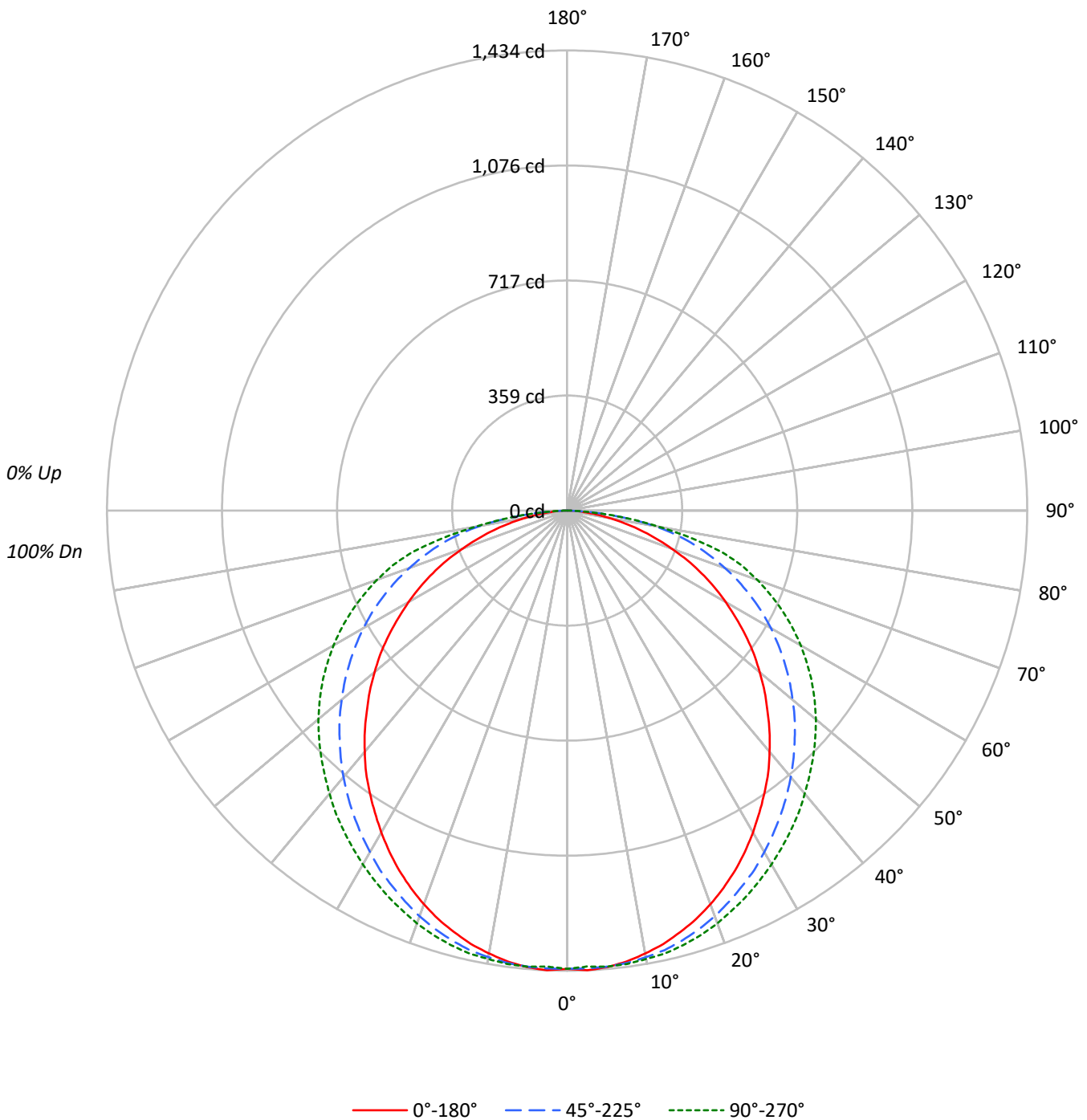
Input Watts (W): 50.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1921	1921	1921
5°	1929	1927	1927
10°	1915	1931	1939
15°	1895	1932	1952
20°	1869	1926	1960
25°	1837	1916	1967
30°	1799	1909	1978
35°	1762	1905	1997
40°	1723	1904	2024
45°	1679	1909	2063
50°	1640	1921	2118
55°	1592	1941	2184
60°	1536	1973	2263
65°	1470	2010	2358
70°	1364	2060	2478
75°	1235	2132	2592
80°	1040	2138	2229
85°	797	1616	1616



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	3.0
10°-20°	390.0	8.7
20°-30°	592.4	13.3
30°-40°	720.5	16.1
40°-50°	767.1	17.2
50°-60°	730.7	16.4
60°-70°	611.0	13.7
70°-80°	407.4	9.1
80°-90°	112.7	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°	1117.9	25.0
0°-40°	1838.4	41.2
0°-60°	3336.2	74.7
0°-90°	4467.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4467.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1428	1428	1428	1428	1428	
5°	1428	1419	1426	1426	1426	135
15°	1360	1363	1387	1397	1401	384
25°	1238	1254	1291	1313	1325	570
35°	1072	1104	1160	1198	1216	671
45°	882	929	1003	1059	1084	682
55°	679	738	828	900	931	607
65°	462	530	631	710	741	456
75°	238	313	410	479	499	252
85°	52	96	105	103	105	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1428.0	1428.0	1428.0	1428.0	1428.0
2.5°	1433.9	1423.6	1428.0	1428.0	1422.1
5°	1428.0	1419.1	1426.5	1426.5	1426.5
7.5°	1417.7	1410.3	1422.1	1425.0	1425.0
10°	1401.4	1398.5	1413.2	1417.7	1419.1
12.5°	1383.7	1382.3	1402.9	1408.8	1413.2
15°	1360.1	1363.1	1386.7	1397.0	1401.4
17.5°	1335.1	1341.0	1367.5	1382.3	1386.7
20°	1305.6	1314.4	1345.4	1360.1	1369.0
22.5°	1273.1	1286.4	1318.8	1336.5	1346.9
25°	1237.7	1253.9	1290.8	1312.9	1324.7
27.5°	1199.3	1220.0	1262.8	1287.9	1299.7
30°	1158.0	1181.6	1228.8	1258.3	1273.1
32.5°	1115.3	1143.3	1194.9	1227.4	1245.1
35°	1072.5	1103.5	1159.5	1197.9	1215.6
37.5°	1029.7	1060.7	1122.6	1163.9	1186.1
40°	981.0	1017.9	1084.3	1130.0	1152.1
42.5°	933.8	973.6	1044.4	1094.6	1118.2
45°	882.2	929.4	1003.1	1059.2	1084.3
47.5°	835.0	882.2	961.8	1020.8	1048.9
50°	783.3	833.5	917.6	982.5	1012.0
52.5°	733.2	784.8	873.3	942.7	972.2
55°	678.6	737.6	827.6	899.9	930.9
57.5°	624.0	687.4	780.4	855.6	886.6
60°	570.9	635.8	733.2	808.4	840.9
62.5°	517.8	582.7	684.5	761.2	792.2
65°	461.7	529.6	631.4	709.6	740.6
67.5°	405.7	476.5	578.3	656.5	686.0
70°	346.7	421.9	523.7	600.4	629.9
72.5°	292.1	367.3	467.6	542.9	570.9
75°	237.5	312.7	410.1	479.4	498.6
77.5°	184.4	259.6	346.7	392.4	396.8
80°	134.2	205.1	275.9	289.1	287.7
82.5°	90.0	153.4	190.3	191.8	196.2
85°	51.6	95.9	104.7	103.3	104.7
87.5°	20.7	33.9	29.5	22.1	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)