

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: P388872

Luminaire Tested: **24CZ2-55VHE-SQR-UNV-L930-CD1-SDWPD1-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: P388872
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: 24CZ2-55VHE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4306.3 lumens
Efficiency: N/A
Efficacy: 119.3 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

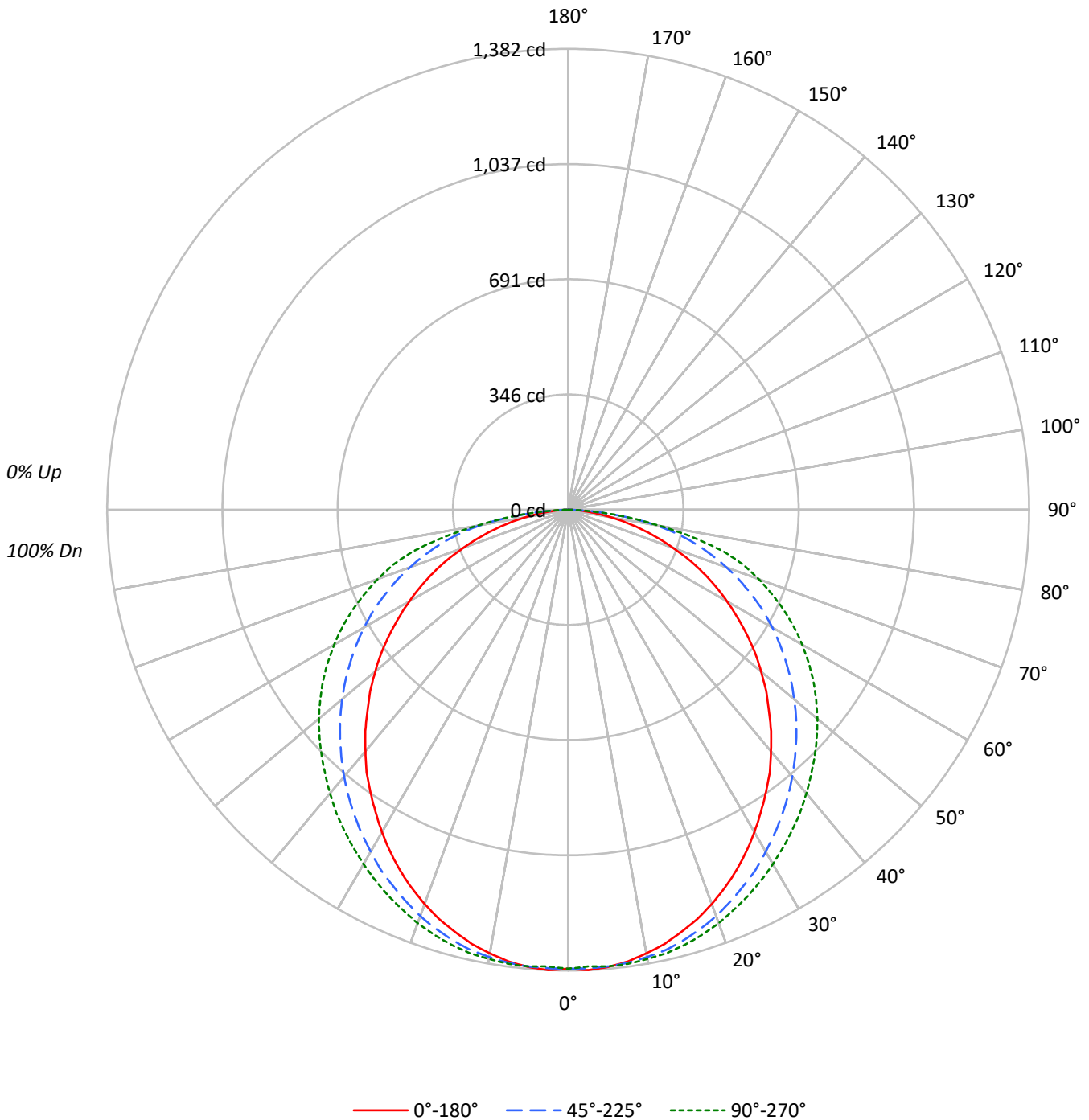
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1852	1852	1852
5°	1859	1857	1857
10°	1846	1861	1869
15°	1826	1862	1882
20°	1802	1857	1889
25°	1771	1847	1896
30°	1734	1840	1907
35°	1698	1836	1925
40°	1661	1836	1951
45°	1618	1840	1989
50°	1581	1851	2042
55°	1534	1871	2105
60°	1481	1902	2181
65°	1417	1938	2273
70°	1315	1986	2389
75°	1190	2055	2498
80°	1003	2060	2149
85°	769	1559	1559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	3.0
10°-20°	375.9	8.7
20°-30°	571.0	13.3
30°-40°	694.6	16.1
40°-50°	739.5	17.2
50°-60°	704.3	16.4
60°-70°	589.0	13.7
70°-80°	392.7	9.1
80°-90°	108.7	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°	1077.6	25.0
0°-40°	1772.2	41.2
0°-60°	3215.9	74.7
0°-90°	4306.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4306.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1376	1368	1375	1375	1375	131
15°	1311	1314	1337	1347	1351	370
25°	1193	1209	1244	1266	1277	549
35°	1034	1064	1118	1155	1172	647
45°	850	896	967	1021	1045	657
55°	654	711	798	867	897	585
65°	445	510	609	684	714	440
75°	229	302	395	462	481	243
85°	50	92	101	100	101	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1376.5	1376.5	1376.5	1376.5	1376.5
2.5°	1382.2	1372.2	1376.5	1376.5	1370.8
5°	1376.5	1368.0	1375.1	1375.1	1375.1
7.5°	1366.5	1359.4	1370.8	1373.7	1373.7
10°	1350.9	1348.1	1362.3	1366.5	1368.0
12.5°	1333.8	1332.4	1352.3	1358.0	1362.3
15°	1311.1	1313.9	1336.7	1346.6	1350.9
17.5°	1286.9	1292.6	1318.2	1332.4	1336.7
20°	1258.5	1267.0	1296.9	1311.1	1319.6
22.5°	1227.2	1240.0	1271.3	1288.3	1298.3
25°	1193.1	1208.7	1244.3	1265.6	1277.0
27.5°	1156.1	1176.0	1217.2	1241.4	1252.8
30°	1116.3	1139.0	1184.5	1213.0	1227.2
32.5°	1075.0	1102.1	1151.8	1183.1	1200.2
35°	1033.8	1063.7	1117.7	1154.7	1171.7
37.5°	992.6	1022.4	1082.1	1122.0	1143.3
40°	945.6	981.2	1045.2	1089.3	1110.6
42.5°	900.1	938.5	1006.8	1055.1	1077.9
45°	850.4	895.9	967.0	1021.0	1045.2
47.5°	804.9	850.4	927.1	984.0	1011.0
50°	755.1	803.4	884.5	947.1	975.5
52.5°	706.7	756.5	841.8	908.7	937.1
55°	654.1	711.0	797.7	867.4	897.3
57.5°	601.5	662.7	752.2	824.8	854.6
60°	550.3	612.9	706.7	779.3	810.5
62.5°	499.1	561.7	659.8	733.8	763.6
65°	445.1	510.5	608.6	684.0	713.8
67.5°	391.1	459.3	557.4	632.8	661.2
70°	334.2	406.7	504.8	578.8	607.2
72.5°	281.6	354.1	450.8	523.3	550.3
75°	228.9	301.5	395.3	462.2	480.6
77.5°	177.8	250.3	334.2	378.3	382.5
80°	129.4	197.7	265.9	278.7	277.3
82.5°	86.7	147.9	183.4	184.9	189.1
85°	49.8	92.4	101.0	99.5	101.0
87.5°	19.9	32.7	28.4	21.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)