

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: P388522

Luminaire Tested: **24CZ2-30VHE-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: P388522
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: 24CZ2-30VHE-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: 2589.4 lumens
Efficiency: N/A
Efficacy: 126.9 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

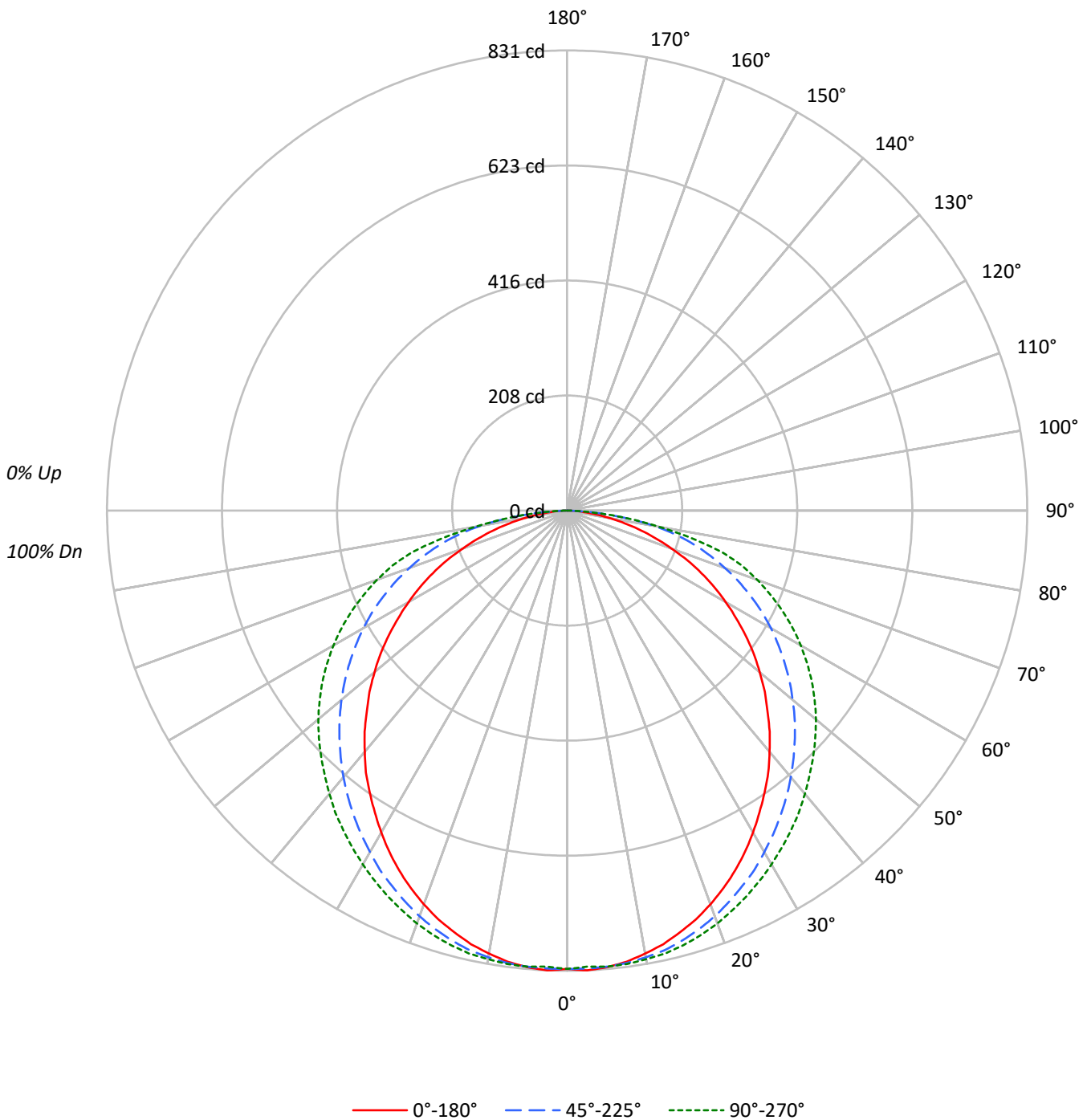
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1114	1114	1114
5°	1118	1117	1117
10°	1110	1119	1124
15°	1098	1120	1131
20°	1083	1117	1136
25°	1065	1111	1140
30°	1043	1107	1146
35°	1021	1104	1157
40°	999	1104	1173
45°	973	1106	1196
50°	950	1113	1228
55°	923	1125	1266
60°	890	1144	1312
65°	852	1165	1366
70°	790	1194	1436
75°	716	1236	1502
80°	603	1239	1292
85°	462	937	937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	3.0
10°-20°	226.0	8.7
20°-30°	343.4	13.3
30°-40°	417.6	16.1
40°-50°	444.6	17.2
50°-60°	423.5	16.4
60°-70°	354.2	13.7
70°-80°	236.1	9.1
80°-90°	65.3	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°	648.0	25.0
0°-40°	1065.6	41.2
0°-60°	1933.8	74.7
0°-90°	2589.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	828	823	827	827	827	79
15°	788	790	804	810	812	222
25°	717	727	748	761	768	330
35°	622	640	672	694	705	389
45°	511	539	581	614	628	395
55°	393	428	480	522	540	352
65°	268	307	366	411	429	264
75°	138	181	238	278	289	146
85°	30	56	61	60	61	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	827.7	827.7	827.7	827.7	827.7
2.5°	831.1	825.1	827.7	827.7	824.3
5°	827.7	822.6	826.8	826.8	826.8
7.5°	821.7	817.4	824.3	826.0	826.0
10°	812.3	810.6	819.1	821.7	822.6
12.5°	802.0	801.2	813.2	816.6	819.1
15°	788.4	790.1	803.8	809.7	812.3
17.5°	773.8	777.2	792.6	801.2	803.8
20°	756.7	761.9	779.8	788.4	793.5
22.5°	737.9	745.6	764.4	774.7	780.7
25°	717.4	726.8	748.2	761.0	767.8
27.5°	695.2	707.1	731.9	746.5	753.3
30°	671.2	684.9	712.3	729.4	737.9
32.5°	646.4	662.7	692.6	711.4	721.7
35°	621.6	639.6	672.1	694.3	704.6
37.5°	596.8	614.8	650.7	674.6	687.5
40°	568.6	590.0	628.5	655.0	667.8
42.5°	541.3	564.3	605.4	634.5	648.1
45°	511.3	538.7	581.4	613.9	628.5
47.5°	484.0	511.3	557.5	591.7	607.9
50°	454.0	483.1	531.8	569.5	586.6
52.5°	425.0	454.9	506.2	546.4	563.5
55°	393.3	427.5	479.7	521.6	539.5
57.5°	361.7	398.5	452.3	495.9	513.9
60°	330.9	368.5	425.0	468.6	487.4
62.5°	300.1	337.7	396.7	441.2	459.2
65°	267.6	307.0	366.0	411.3	429.2
67.5°	235.1	276.2	335.2	380.5	397.6
70°	200.9	244.5	303.5	348.0	365.1
72.5°	169.3	212.9	271.1	314.7	330.9
75°	137.7	181.3	237.7	277.9	289.0
77.5°	106.9	150.5	200.9	227.4	230.0
80°	77.8	118.9	159.9	167.6	166.7
82.5°	52.2	88.9	110.3	111.2	113.7
85°	29.9	55.6	60.7	59.9	60.7
87.5°	12.0	19.7	17.1	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)