

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: P388517

Luminaire Tested: **24CZ2-30VHE-SQR-UNV-L935-CD1-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: P388517
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-L935-CD1-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: 2444.9 lumens
Efficiency: N/A
Efficacy: 119.8 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

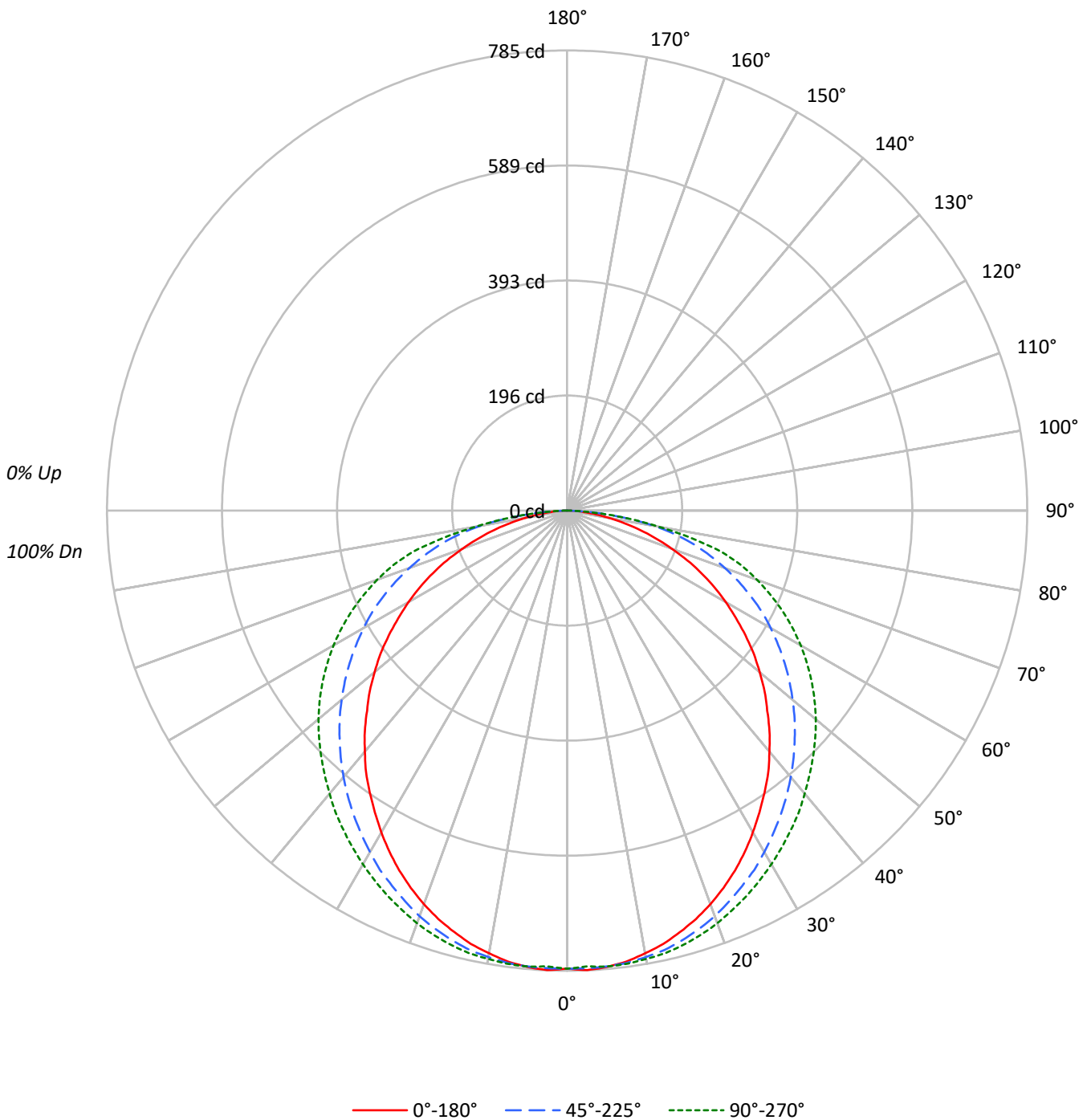
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1051	1051	1051
5°	1056	1054	1054
10°	1048	1057	1061
15°	1037	1057	1068
20°	1023	1054	1073
25°	1006	1049	1076
30°	985	1045	1082
35°	964	1042	1093
40°	943	1042	1107
45°	919	1045	1129
50°	897	1051	1159
55°	871	1062	1195
60°	841	1080	1238
65°	805	1100	1290
70°	746	1127	1356
75°	676	1167	1419
80°	570	1170	1220
85°	437	885	885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	3.0
10°-20°	213.4	8.7
20°-30°	324.2	13.3
30°-40°	394.3	16.1
40°-50°	419.8	17.2
50°-60°	399.9	16.4
60°-70°	334.4	13.7
70°-80°	223.0	9.1
80°-90°	61.7	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°	611.8	25.0
0°-40°	1006.1	41.2
0°-60°	1825.8	74.7
0°-90°	2444.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2444.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	782	777	781	781	781	74
15°	744	746	759	765	767	210
25°	677	686	706	718	725	312
35°	587	604	635	656	665	367
45°	483	509	549	580	593	373
55°	371	404	453	492	509	332
65°	253	290	346	388	405	250
75°	130	171	224	262	273	138
85°	28	52	57	56	57	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.5	781.5	781.5	781.5	781.5
2.5°	784.7	779.1	781.5	781.5	778.3
5°	781.5	776.7	780.7	780.7	780.7
7.5°	775.9	771.8	778.3	779.9	779.9
10°	767.0	765.4	773.4	775.9	776.7
12.5°	757.3	756.5	767.8	771.0	773.4
15°	744.4	746.0	758.9	764.6	767.0
17.5°	730.6	733.9	748.4	756.5	758.9
20°	714.5	719.3	736.3	744.4	749.2
22.5°	696.7	704.0	721.8	731.5	737.1
25°	677.4	686.2	706.4	718.5	725.0
27.5°	656.4	667.7	691.1	704.8	711.3
30°	633.8	646.7	672.5	688.7	696.7
32.5°	610.4	625.7	653.9	671.7	681.4
35°	586.9	603.9	634.6	655.6	665.3
37.5°	563.5	580.5	614.4	637.0	649.1
40°	536.9	557.1	593.4	618.4	630.5
42.5°	511.0	532.8	571.6	599.0	612.0
45°	482.8	508.6	549.0	579.7	593.4
47.5°	457.0	482.8	526.4	558.7	574.0
50°	428.7	456.1	502.2	537.7	553.8
52.5°	401.2	429.5	477.9	515.9	532.0
55°	371.4	403.7	452.9	492.5	509.4
57.5°	341.5	376.2	427.1	468.3	485.2
60°	312.4	348.0	401.2	442.4	460.2
62.5°	283.4	318.9	374.6	416.6	433.5
65°	252.7	289.8	345.5	388.3	405.3
67.5°	222.0	260.8	316.5	359.3	375.4
70°	189.7	230.9	286.6	328.6	344.7
72.5°	159.9	201.0	255.9	297.1	312.4
75°	130.0	171.2	224.4	262.4	272.9
77.5°	100.9	142.1	189.7	214.8	217.2
80°	73.5	112.2	151.0	158.2	157.4
82.5°	49.2	84.0	104.1	105.0	107.4
85°	28.3	52.5	57.3	56.5	57.3
87.5°	11.3	18.6	16.1	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)