

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: P388473

Luminaire Tested: **24CZ2-30-SQR-UNV-L950-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: P388473
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: 24CZ2-30-SQR-UNV-L950-CD1-SDWPD1-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: 2576.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

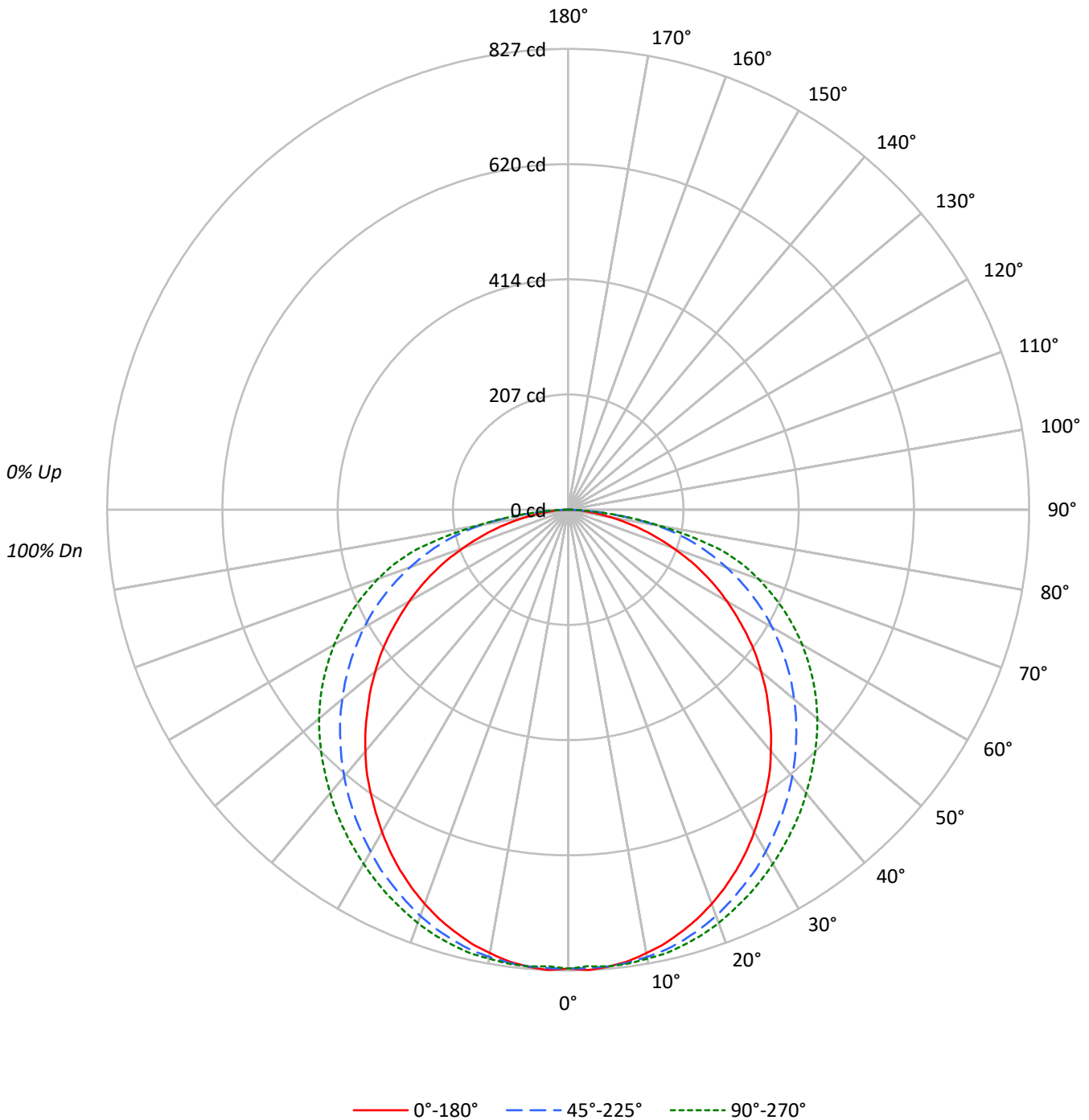
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1108	1108	1108
5°	1112	1111	1111
10°	1104	1113	1118
15°	1092	1114	1126
20°	1078	1111	1130
25°	1060	1105	1134
30°	1037	1101	1141
35°	1016	1098	1151
40°	994	1098	1167
45°	968	1101	1190
50°	946	1108	1221
55°	918	1119	1259
60°	886	1138	1305
65°	848	1159	1359
70°	786	1188	1429
75°	712	1229	1495
80°	600	1233	1285
85°	460	932	932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	3.0
10°-20°	224.9	8.7
20°-30°	341.6	13.3
30°-40°	415.5	16.1
40°-50°	442.3	17.2
50°-60°	421.3	16.4
60°-70°	352.3	13.7
70°-80°	234.9	9.1
80°-90°	65.0	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°	644.6	25.0
0°-40°	1060.1	41.2
0°-60°	1923.8	74.7
0°-90°	2576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	823	818	823	823	823	78
15°	784	786	800	806	808	221
25°	714	723	744	757	764	329
35°	618	636	669	691	701	387
45°	509	536	578	611	625	393
55°	391	425	477	519	537	350
65°	266	305	364	409	427	263
75°	137	180	236	276	288	145
85°	30	55	60	60	60	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	823.4	823.4	823.4	823.4	823.4
2.5°	826.8	820.9	823.4	823.4	820.0
5°	823.4	818.3	822.6	822.6	822.6
7.5°	817.5	813.2	820.0	821.7	821.7
10°	808.1	806.4	814.9	817.5	818.3
12.5°	797.9	797.0	809.0	812.4	814.9
15°	784.3	786.0	799.6	805.6	808.1
17.5°	769.8	773.2	788.5	797.0	799.6
20°	752.8	757.9	775.8	784.3	789.4
22.5°	734.1	741.8	760.5	770.7	776.6
25°	713.7	723.0	744.3	757.1	763.9
27.5°	691.6	703.5	728.1	742.6	749.4
30°	667.7	681.4	708.6	725.6	734.1
32.5°	643.1	659.2	689.0	707.7	717.9
35°	618.4	636.3	668.6	690.7	700.9
37.5°	593.7	611.6	647.3	671.2	683.9
40°	565.7	586.9	625.2	651.6	664.3
42.5°	538.5	561.4	602.2	631.2	644.8
45°	508.7	535.9	578.4	610.8	625.2
47.5°	481.5	508.7	554.6	588.6	604.8
50°	451.7	480.6	529.1	566.5	583.5
52.5°	422.8	452.5	503.6	543.6	560.6
55°	391.3	425.3	477.2	518.9	536.8
57.5°	359.8	396.4	450.0	493.4	511.2
60°	329.2	366.6	422.8	466.1	484.9
62.5°	298.6	336.0	394.7	438.9	456.8
65°	266.2	305.4	364.1	409.2	427.0
67.5°	233.9	274.8	333.4	378.5	395.5
70°	199.9	243.3	302.0	346.2	363.2
72.5°	168.4	211.8	269.7	313.0	329.2
75°	137.0	180.3	236.5	276.5	287.5
77.5°	106.3	149.7	199.9	226.3	228.8
80°	77.4	118.2	159.1	166.7	165.9
82.5°	51.9	88.5	109.7	110.6	113.1
85°	29.8	55.3	60.4	59.5	60.4
87.5°	11.9	19.6	17.0	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)