

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: P387816

Luminaire Tested: **22CZ2-29VHE-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: P387816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x2 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: 2407.5 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

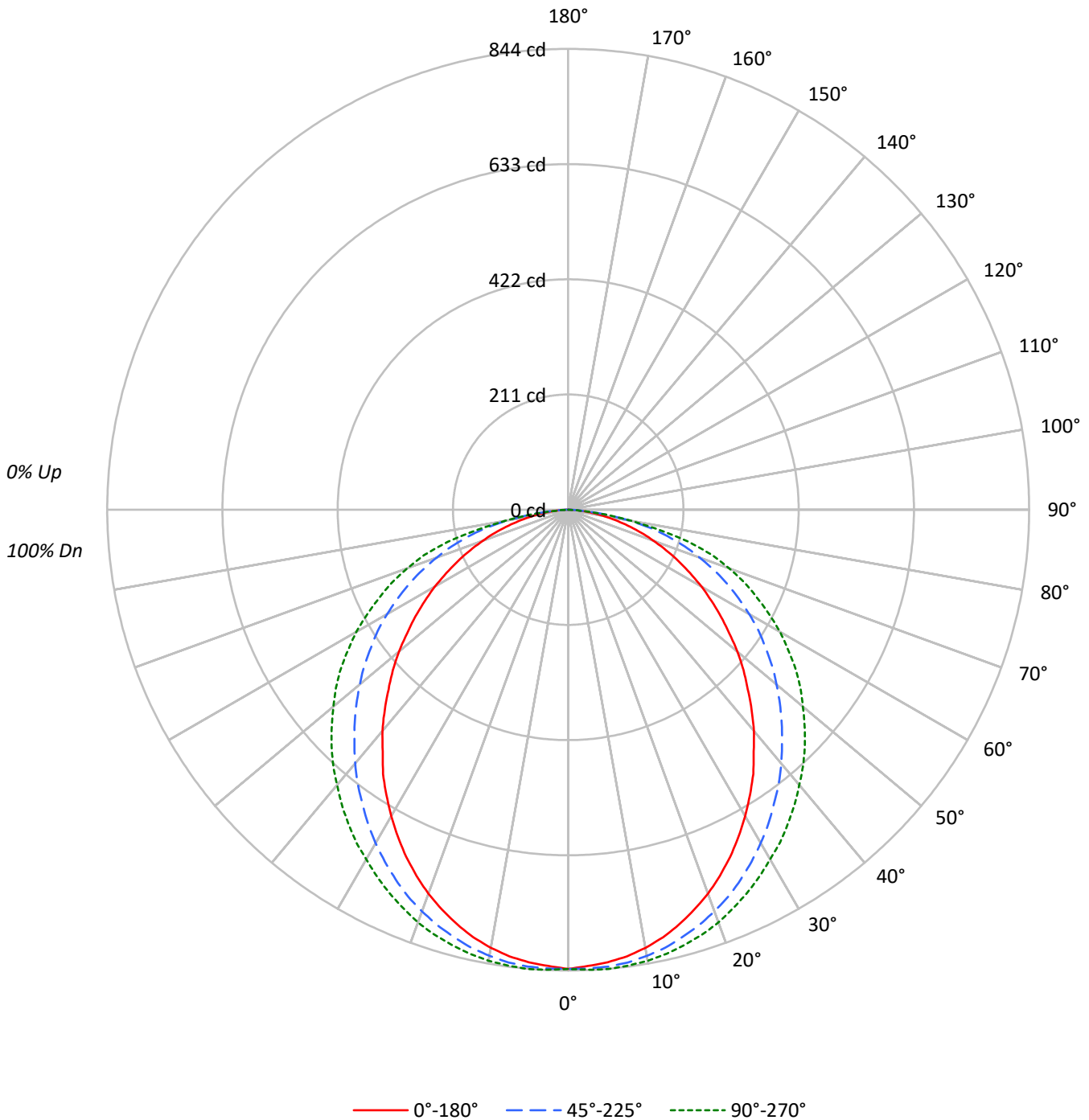
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83																												
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69																												
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58																												
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49																												
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																												
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37																												
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																												
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																												
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																												
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2263	2263	2263
5°	2247	2269	2281
10°	2226	2267	2292
15°	2190	2257	2298
20°	2143	2241	2304
25°	2083	2219	2300
30°	2013	2191	2297
35°	1941	2158	2305
40°	1859	2132	2312
45°	1770	2105	2331
50°	1693	2086	2349
55°	1603	2069	2386
60°	1519	2060	2411
65°	1419	2045	2430
70°	1304	2014	2463
75°	1176	1960	2376
80°	1009	1736	1788
85°	812	1022	812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	3.3
10°-20°	228.0	9.5
20°-30°	342.4	14.2
30°-40°	408.3	17.0
40°-50°	422.2	17.5
50°-60°	388.1	16.1
60°-70°	309.0	12.8
70°-80°	188.8	7.8
80°-90°	41.0	1.7
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°	650.0	27.0
0°-40°	1058.4	44.0
0°-60°	1868.7	77.6
0°-90°	2407.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2407.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	832	834	840	843	844	79
15°	786	795	810	822	825	221
25°	702	719	747	768	775	323
35°	591	616	657	691	702	369
45°	465	498	553	598	612	360
55°	342	379	441	491	508	306
65°	223	260	321	366	382	221
75°	113	146	188	222	228	120
85°	26	32	33	29	26	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	841.0	841.0	841.0	841.0	841.0
2.5°	836.4	837.6	841.0	843.3	843.3
5°	831.9	834.1	839.9	843.3	844.4
7.5°	825.0	828.4	836.4	841.0	842.1
10°	814.7	819.3	829.6	836.4	838.7
12.5°	802.1	809.0	821.6	830.7	833.0
15°	786.2	795.3	810.1	821.6	825.0
17.5°	767.9	779.3	797.6	811.3	815.9
20°	748.4	759.9	782.7	798.7	804.4
22.5°	725.6	740.4	766.7	785.0	789.6
25°	701.6	718.7	747.3	767.9	774.7
27.5°	675.3	695.9	726.7	751.9	757.6
30°	647.9	669.6	705.0	732.4	739.3
32.5°	619.3	644.5	682.2	713.0	722.2
35°	590.8	615.9	657.0	691.3	701.6
37.5°	557.6	587.3	633.0	668.5	681.0
40°	529.1	557.6	606.8	645.6	658.2
42.5°	497.1	527.9	579.3	621.6	636.5
45°	465.1	498.2	553.0	597.6	612.5
47.5°	435.4	468.5	525.6	572.5	587.3
50°	404.5	438.8	498.2	546.2	561.0
52.5°	371.4	409.1	470.8	518.8	535.9
55°	341.7	379.4	441.1	491.3	508.5
57.5°	310.8	349.7	413.6	461.6	477.6
60°	282.2	319.9	382.8	429.6	447.9
62.5°	251.4	290.2	351.9	397.6	414.8
65°	222.8	260.5	321.1	365.7	381.6
67.5°	194.3	232.0	289.1	331.4	349.7
70°	165.7	203.4	256.0	297.1	313.1
72.5°	140.5	173.7	224.0	261.7	276.5
75°	113.1	146.3	188.5	221.7	228.5
77.5°	88.0	117.7	153.1	168.0	170.3
80°	65.1	88.0	112.0	115.4	115.4
82.5°	43.4	60.6	69.7	70.8	69.7
85°	26.3	32.0	33.1	28.6	26.3
87.5°	9.1	9.1	5.7	3.4	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)