

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: P230816

Luminaire Tested: **22CZ-LD5-44-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-44-SQP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2537.0 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

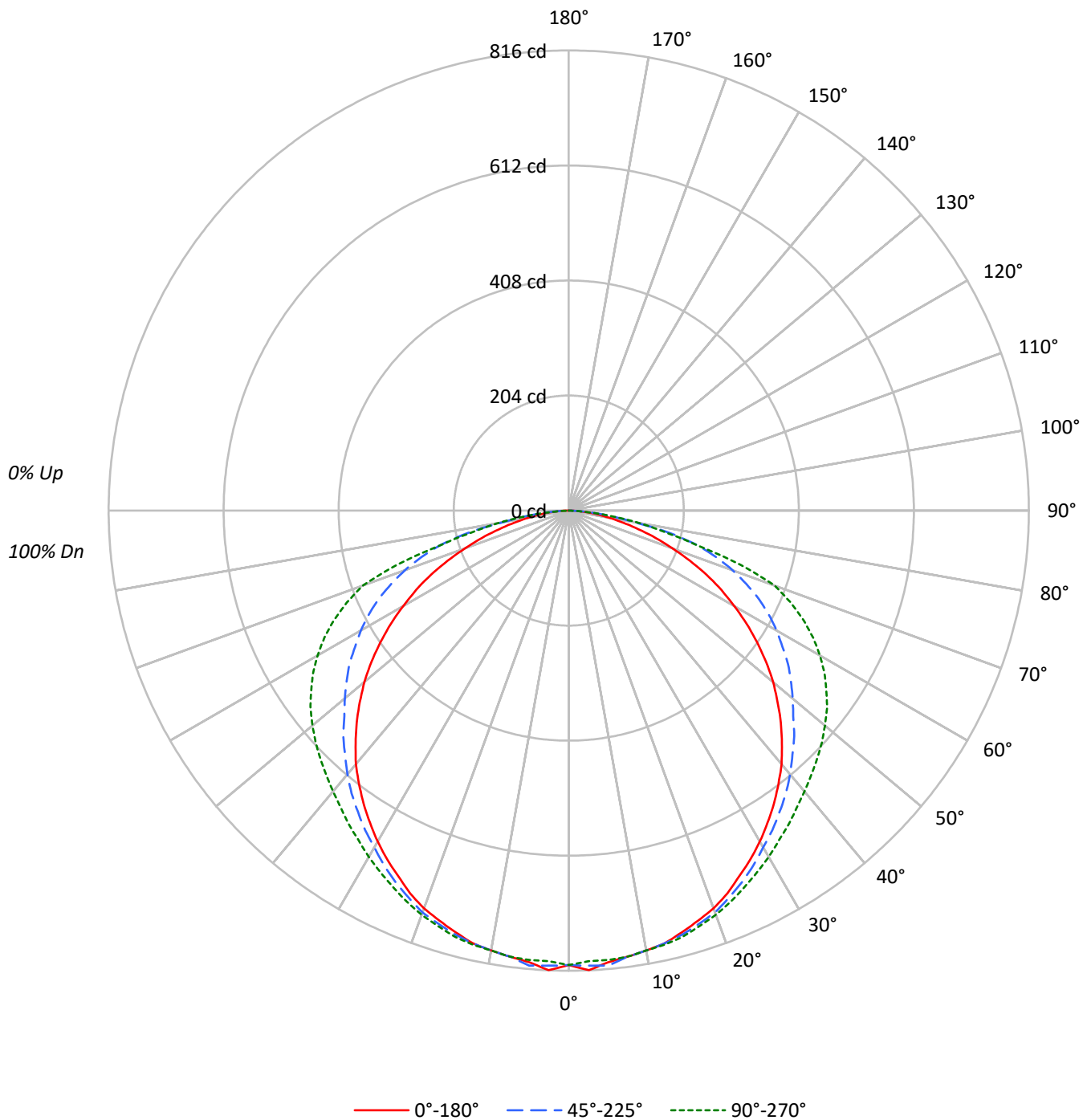
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83		
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68		
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56		
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47		
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41		
6	68	55	45	39	66	54	45	39	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	29	28		
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25		
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2168	2168	2168
5°	2171	2187	2161
10°	2164	2164	2164
15°	2157	2168	2179
20°	2150	2172	2184
25°	2124	2159	2188
30°	2106	2143	2204
35°	2084	2142	2233
40°	2062	2146	2284
45°	2025	2152	2369
50°	1980	2169	2483
55°	1913	2228	2616
60°	1824	2291	2767
65°	1719	2371	2923
70°	1535	2434	3054
75°	1332	2438	2417
80°	1130	1801	1954
85°	973	1216	1096



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	3.0
10°-20°	219.7	8.7
20°-30°	334.8	13.2
30°-40°	409.7	16.1
40°-50°	440.8	17.4
50°-60°	427.0	16.8
60°-70°	361.7	14.3
70°-80°	218.7	8.6
80°-90°	48.0	1.9
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°	631.1	24.9
0°-40°	1040.8	41.0
0°-60°	1908.6	75.2
0°-90°	2537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2537.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	804	804	810	806	800	76
15°	774	776	778	780	782	219
25°	715	719	727	733	737	330
35°	634	638	652	670	680	397
45°	532	542	566	601	623	410
55°	408	426	475	530	558	364
65°	270	300	372	432	459	266
75°	128	173	234	238	232	138
85°	32	37	39	37	36	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.8	805.8	805.8	805.8	805.8
2.5°	815.7	813.7	807.8	803.8	799.9
5°	803.8	803.8	809.8	805.8	799.9
7.5°	797.9	797.9	797.9	807.8	797.9
10°	792.0	794.0	792.0	799.9	792.0
12.5°	786.1	786.1	786.1	788.1	788.1
15°	774.3	776.3	778.2	780.2	782.2
17.5°	762.5	764.4	768.4	770.4	772.3
20°	750.7	752.6	758.5	758.5	762.5
22.5°	734.9	734.9	742.8	744.7	750.7
25°	715.2	719.1	727.0	732.9	736.9
27.5°	697.5	701.4	709.3	717.2	723.1
30°	677.8	681.7	689.6	701.4	709.3
32.5°	656.1	660.0	671.8	685.6	693.5
35°	634.4	638.4	652.1	669.9	679.7
37.5°	610.8	616.7	632.4	652.1	664.0
40°	587.1	593.0	610.8	632.4	650.2
42.5°	559.5	567.4	587.1	616.7	636.4
45°	532.0	541.8	565.5	600.9	622.6
47.5°	502.4	512.3	539.8	585.2	608.8
50°	472.9	484.7	518.2	567.4	593.0
52.5°	441.3	453.2	496.5	549.7	577.3
55°	407.8	425.6	474.8	530.0	557.6
57.5°	374.3	394.0	449.2	508.3	537.9
60°	338.9	362.5	425.6	484.7	514.2
62.5°	305.4	331.0	400.0	459.1	488.6
65°	269.9	299.5	372.4	431.5	459.1
67.5°	232.5	269.9	340.8	398.0	425.6
70°	195.1	238.4	309.3	362.5	388.1
72.5°	161.6	206.9	273.9	319.2	319.2
75°	128.1	173.4	234.5	238.4	232.5
77.5°	98.5	141.9	183.2	167.5	171.4
80°	72.9	108.4	116.2	122.2	126.1
82.5°	49.3	72.9	74.9	78.8	78.8
85°	31.5	37.4	39.4	37.4	35.5
87.5°	13.8	15.8	11.8	7.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)