

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: P230832

Luminaire Tested: **22CZ-LD5-39SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230832
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-LD5-39SE-SQP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2266.0 lumens
Efficiency: N/A
Efficacy: 64.9 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

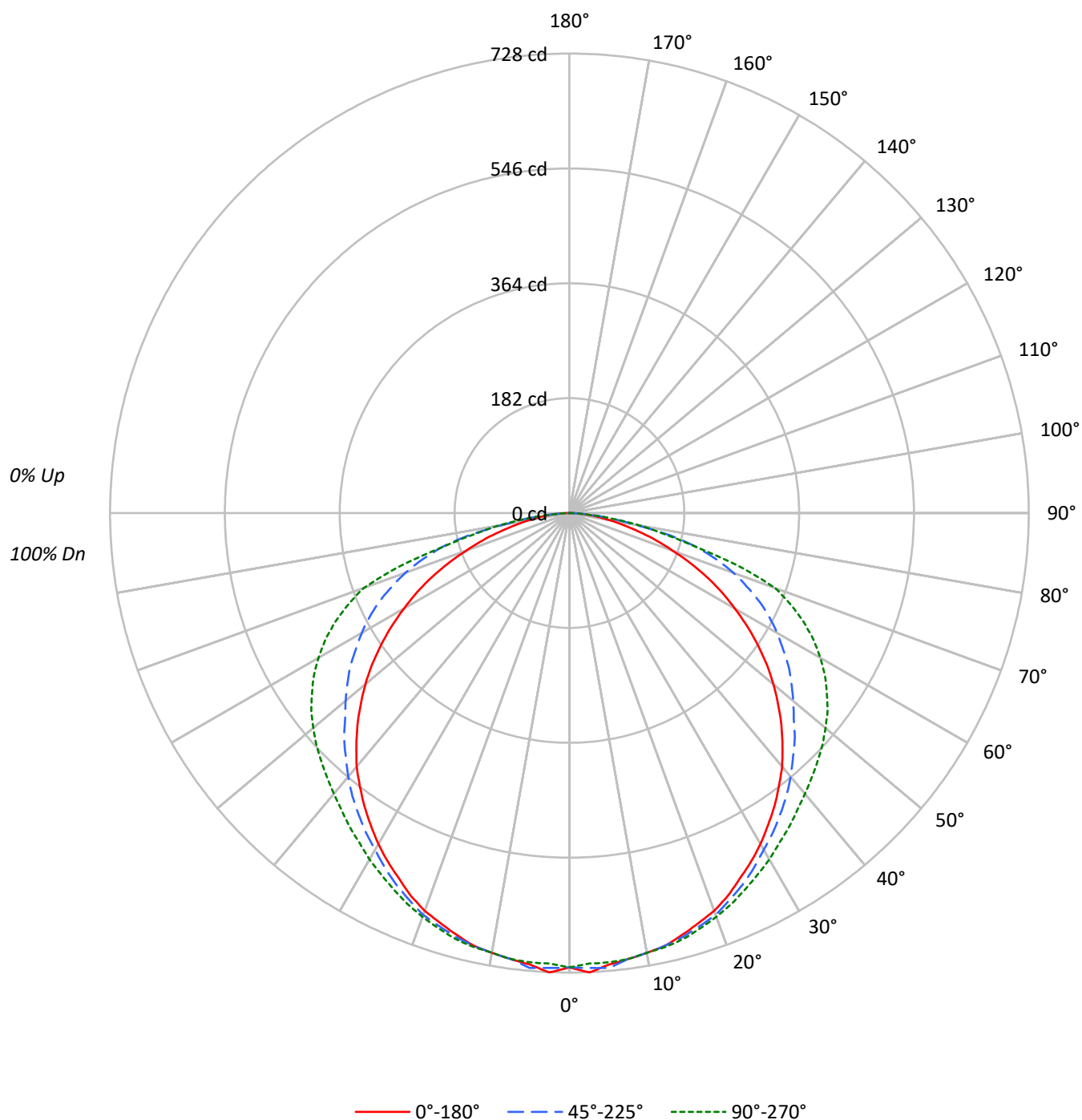
Input Watts (W): 34.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1937	1937	1937
5°	1940	1954	1930
10°	1933	1933	1933
15°	1927	1936	1946
20°	1920	1940	1950
25°	1897	1928	1954
30°	1881	1914	1968
35°	1861	1914	1994
40°	1842	1916	2040
45°	1808	1922	2116
50°	1768	1937	2218
55°	1709	1990	2336
60°	1629	2046	2472
65°	1535	2118	2611
70°	1371	2174	2728
75°	1189	2177	2159
80°	1009	1609	1745
85°	871	1087	979



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.0
10°-20°	196.2	8.7
20°-30°	299.1	13.2
30°-40°	365.9	16.1
40°-50°	393.7	17.4
50°-60°	381.4	16.8
60°-70°	323.1	14.3
70°-80°	195.3	8.6
80°-90°	42.9	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°	563.7	24.9
0°-40°	929.6	41.0
0°-60°	1704.7	75.2
0°-90°	2266.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2266.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	718	718	723	720	714	68
15°	692	693	695	697	699	195
25°	639	642	649	655	658	295
35°	567	570	582	598	607	354
45°	475	484	505	537	556	366
55°	364	380	424	473	498	325
65°	241	268	333	385	410	237
75°	114	155	209	213	208	123
85°	28	33	35	33	32	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.7	719.7	719.7	719.7	719.7
2.5°	728.5	726.8	721.5	718.0	714.5
5°	718.0	718.0	723.3	719.7	714.5
7.5°	712.7	712.7	712.7	721.5	712.7
10°	707.4	709.2	707.4	714.5	707.4
12.5°	702.1	702.1	702.1	703.9	703.9
15°	691.6	693.3	695.1	696.9	698.6
17.5°	681.0	682.8	686.3	688.1	689.8
20°	670.5	672.2	677.5	677.5	681.0
22.5°	656.4	656.4	663.4	665.2	670.5
25°	638.8	642.3	649.4	654.6	658.2
27.5°	623.0	626.5	633.5	640.6	645.8
30°	605.4	608.9	615.9	626.5	633.5
32.5°	586.0	589.5	600.1	612.4	619.4
35°	566.6	570.2	582.5	598.3	607.1
37.5°	545.5	550.8	564.9	582.5	593.0
40°	524.4	529.7	545.5	564.9	580.7
42.5°	499.8	506.8	524.4	550.8	568.4
45°	475.1	483.9	505.1	536.7	556.1
47.5°	448.7	457.5	482.2	522.6	543.8
50°	422.3	432.9	462.8	506.8	529.7
52.5°	394.2	404.7	443.5	491.0	515.6
55°	364.3	380.1	424.1	473.4	498.0
57.5°	334.4	352.0	401.2	454.0	480.4
60°	302.7	323.8	380.1	432.9	459.3
62.5°	272.8	295.6	357.2	410.0	436.4
65°	241.1	267.5	332.6	385.4	410.0
67.5°	207.7	241.1	304.4	355.5	380.1
70°	174.2	212.9	276.3	323.8	346.7
72.5°	144.3	184.8	244.6	285.1	285.1
75°	114.4	154.9	209.4	212.9	207.7
77.5°	88.0	126.7	163.7	149.6	153.1
80°	65.1	96.8	103.8	109.1	112.6
82.5°	44.0	65.1	66.9	70.4	70.4
85°	28.2	33.4	35.2	33.4	31.7
87.5°	12.3	14.1	10.6	7.0	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)