

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: P389166

Luminaire Tested: **22CZ2-24VHE-S-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: P389166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2324.8 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

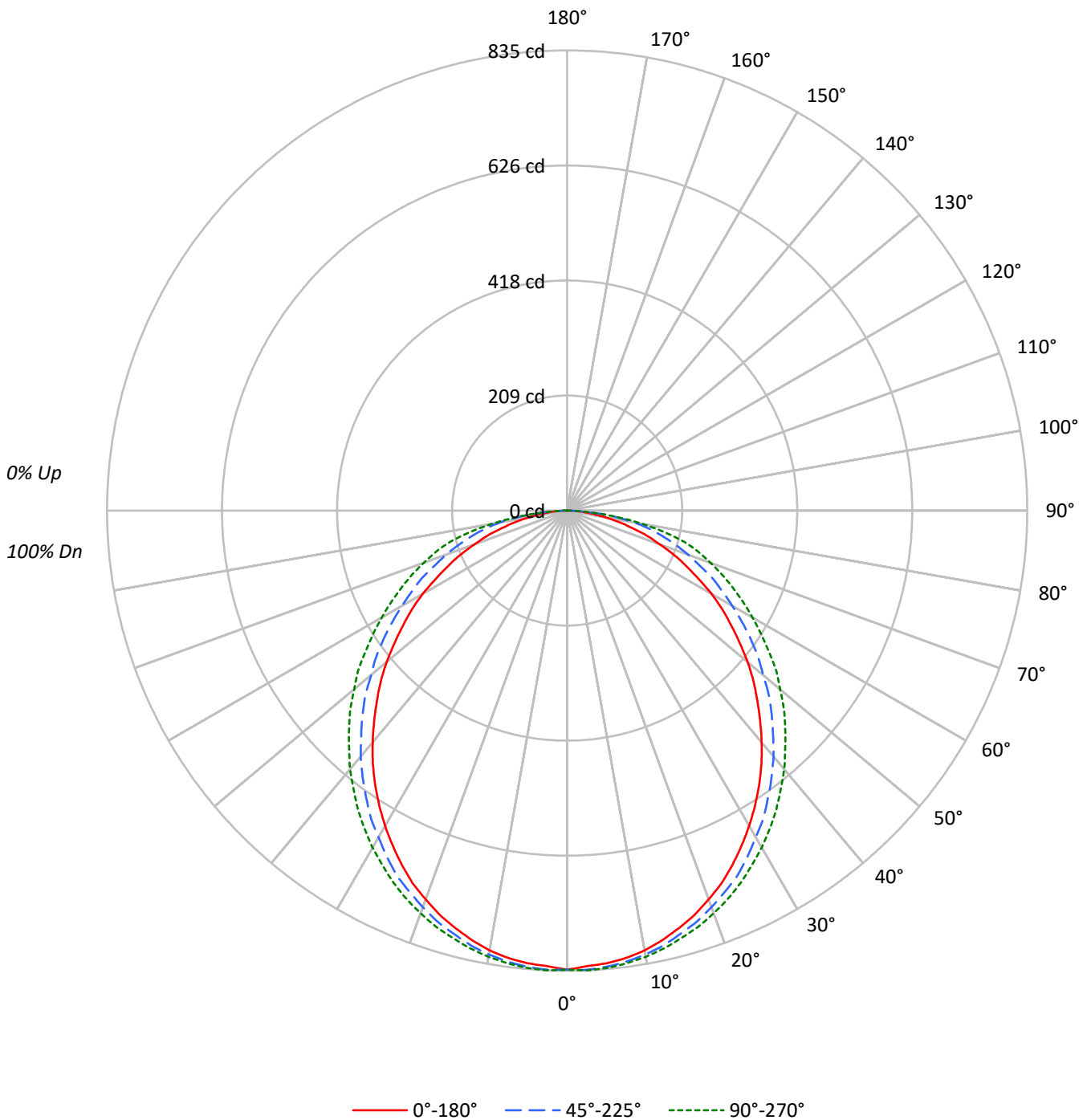
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2242	2242	2242
5°	2227	2244	2250
10°	2214	2235	2247
15°	2185	2215	2236
20°	2149	2193	2227
25°	2106	2171	2213
30°	2053	2127	2194
35°	1995	2088	2174
40°	1928	2046	2153
45°	1858	1998	2130
50°	1789	1944	2112
55°	1705	1909	2097
60°	1629	1862	2090
65°	1519	1851	2113
70°	1400	1835	2176
75°	1263	1861	2289
80°	1093	1917	2151
85°	905	1609	1609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	3.4
10°-20°	224.2	9.6
20°-30°	335.4	14.4
30°-40°	397.3	17.1
40°-50°	404.9	17.4
50°-60°	362.9	15.6
60°-70°	284.1	12.2
70°-80°	183.2	7.9
80°-90°	54.1	2.3
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°	638.4	27.5
0°-40°	1035.7	44.5
0°-60°	1803.4	77.6
0°-90°	2324.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2324.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	824	826	831	832	833	78
15°	784	789	795	802	803	221
25°	709	716	731	741	745	327
35°	607	615	636	655	662	380
45°	488	499	525	552	560	377
55°	363	375	407	435	447	326
65°	239	253	291	319	332	237
75°	122	140	179	209	220	130
85°	29	40	52	52	52	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.0	833.0	833.0	833.0	833.0
2.5°	827.6	829.8	834.1	835.2	835.2
5°	824.4	826.5	830.9	832.0	833.0
7.5°	818.9	820.0	825.5	827.6	828.7
10°	810.3	812.4	817.9	821.1	822.2
12.5°	798.3	801.6	808.1	812.4	813.5
15°	784.2	788.6	795.1	801.6	802.7
17.5°	769.1	773.4	782.1	789.7	791.8
20°	750.6	756.0	765.8	774.5	777.7
22.5°	732.2	736.5	748.4	759.3	762.5
25°	709.4	715.9	731.1	740.8	745.2
27.5°	685.5	693.1	708.3	721.3	725.7
30°	660.6	668.2	684.4	700.7	706.1
32.5°	634.5	643.2	662.8	679.0	684.4
35°	607.4	615.0	635.6	655.2	661.7
37.5°	579.2	585.7	609.6	630.2	636.7
40°	548.9	557.5	582.5	606.3	612.9
42.5°	518.5	528.2	553.2	579.2	585.7
45°	488.1	499.0	525.0	552.1	559.7
47.5°	458.8	467.5	496.8	522.8	533.7
50°	427.4	436.0	464.3	493.5	504.4
52.5°	394.8	406.8	437.1	465.3	478.4
55°	363.4	375.3	406.8	435.0	446.9
57.5°	334.1	343.8	376.4	405.7	417.6
60°	302.6	311.3	346.0	377.5	388.3
62.5°	269.0	282.0	317.8	347.1	360.1
65°	238.6	252.7	290.7	318.9	331.9
67.5°	210.4	223.4	260.3	290.7	304.8
70°	177.9	195.2	233.2	263.6	276.6
72.5°	151.9	167.0	206.1	236.5	250.6
75°	121.5	139.9	179.0	209.3	220.2
77.5°	96.5	115.0	151.9	175.7	181.1
80°	70.5	88.9	123.7	135.6	138.8
82.5°	47.7	65.1	88.9	92.2	93.3
85°	29.3	40.1	52.1	52.1	52.1
87.5°	14.1	16.3	18.4	17.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)