

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: P259439

Luminaire Tested: **22CZ-LD5-20-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2199.0 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

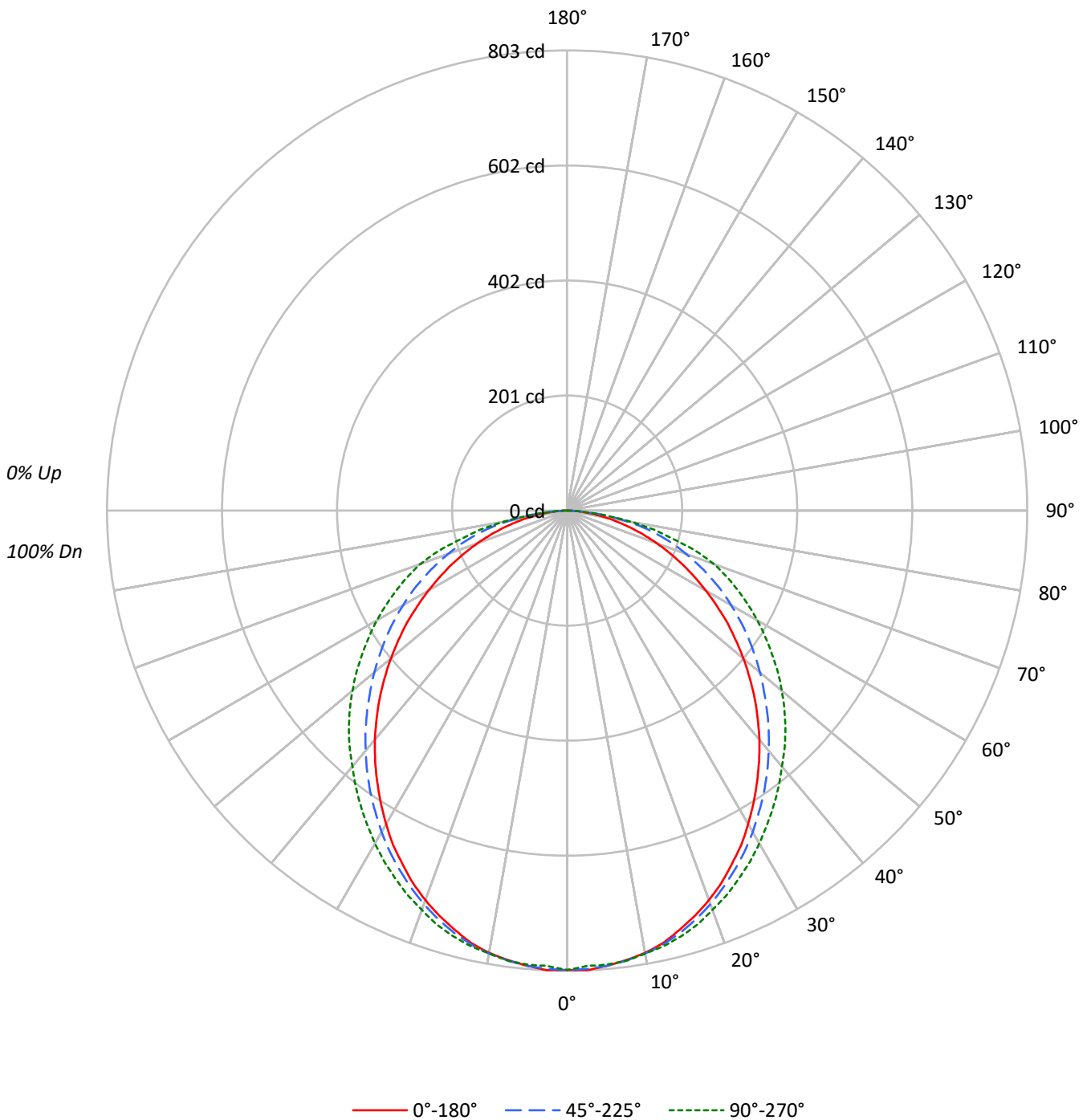
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2157	2157	2157
5°	2154	2154	2148
10°	2141	2144	2144
15°	2110	2125	2142
20°	2072	2093	2123
25°	2020	2054	2104
30°	1963	2012	2084
35°	1898	1967	2064
40°	1833	1922	2048
45°	1760	1877	2050
50°	1680	1840	2047
55°	1601	1809	2046
60°	1506	1779	2063
65°	1412	1755	2092
70°	1304	1736	2144
75°	1175	1724	1988
80°	1031	1604	1736
85°	849	1207	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	3.4
10°-20°	215.1	9.8
20°-30°	319.4	14.5
30°-40°	376.0	17.1
40°-50°	383.3	17.4
50°-60°	345.7	15.7
60°-70°	272.3	12.4
70°-80°	168.0	7.6
80°-90°	43.6	2.0
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°	610.2	27.7
0°-40°	986.1	44.8
0°-60°	1715.1	78.0
0°-90°	2199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	797	798	797	796	795	76
15°	757	760	763	767	769	214
25°	680	684	692	703	709	313
35°	578	584	599	618	628	361
45°	463	470	493	523	539	357
55°	341	353	386	420	436	304
65°	222	238	276	310	328	220
75°	113	132	166	185	191	121
85°	28	35	39	37	35	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.7	801.7	801.7	801.7	801.7
2.5°	802.7	802.7	800.6	798.5	795.3
5°	797.4	798.5	797.4	796.4	795.3
7.5°	791.1	792.2	792.2	792.2	792.2
10°	783.7	784.8	784.8	784.8	784.8
12.5°	773.1	774.2	775.3	776.3	778.4
15°	757.3	760.5	762.6	766.8	768.9
17.5°	741.5	744.6	747.8	753.1	757.3
20°	723.5	725.6	730.9	737.2	741.5
22.5°	703.4	706.6	711.9	720.3	726.7
25°	680.2	684.4	691.8	703.4	708.7
27.5°	658.0	661.2	670.7	683.4	690.8
30°	631.6	635.8	647.5	663.3	670.7
32.5°	605.2	610.5	623.2	641.1	649.6
35°	577.7	584.1	598.9	617.9	628.4
37.5°	550.3	556.6	573.5	594.6	606.3
40°	521.8	528.1	547.1	570.4	583.0
42.5°	492.2	499.6	520.7	547.1	561.9
45°	462.6	470.0	493.3	522.8	538.7
47.5°	432.0	440.4	465.8	498.5	514.4
50°	401.4	410.9	439.4	473.2	489.0
52.5°	370.7	381.3	411.9	446.8	463.7
55°	341.2	352.8	385.5	420.4	436.2
57.5°	309.5	323.2	358.1	391.9	409.8
60°	279.9	294.7	330.6	364.4	383.4
62.5°	250.3	266.2	304.2	338.0	355.9
65°	221.8	237.6	275.7	310.5	328.5
67.5°	193.3	211.2	248.2	283.1	301.0
70°	165.8	184.8	220.7	254.5	272.5
72.5°	139.4	158.4	194.3	226.0	236.6
75°	113.0	132.0	165.8	184.8	191.2
77.5°	88.7	106.7	136.3	147.9	156.3
80°	66.5	82.4	103.5	110.9	112.0
82.5°	45.4	59.1	71.8	72.9	71.8
85°	27.5	34.9	39.1	37.0	34.9
87.5°	12.7	13.7	12.7	8.4	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)