

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: P277305

Luminaire Tested: **22CZ2-39HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L92765-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3241.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

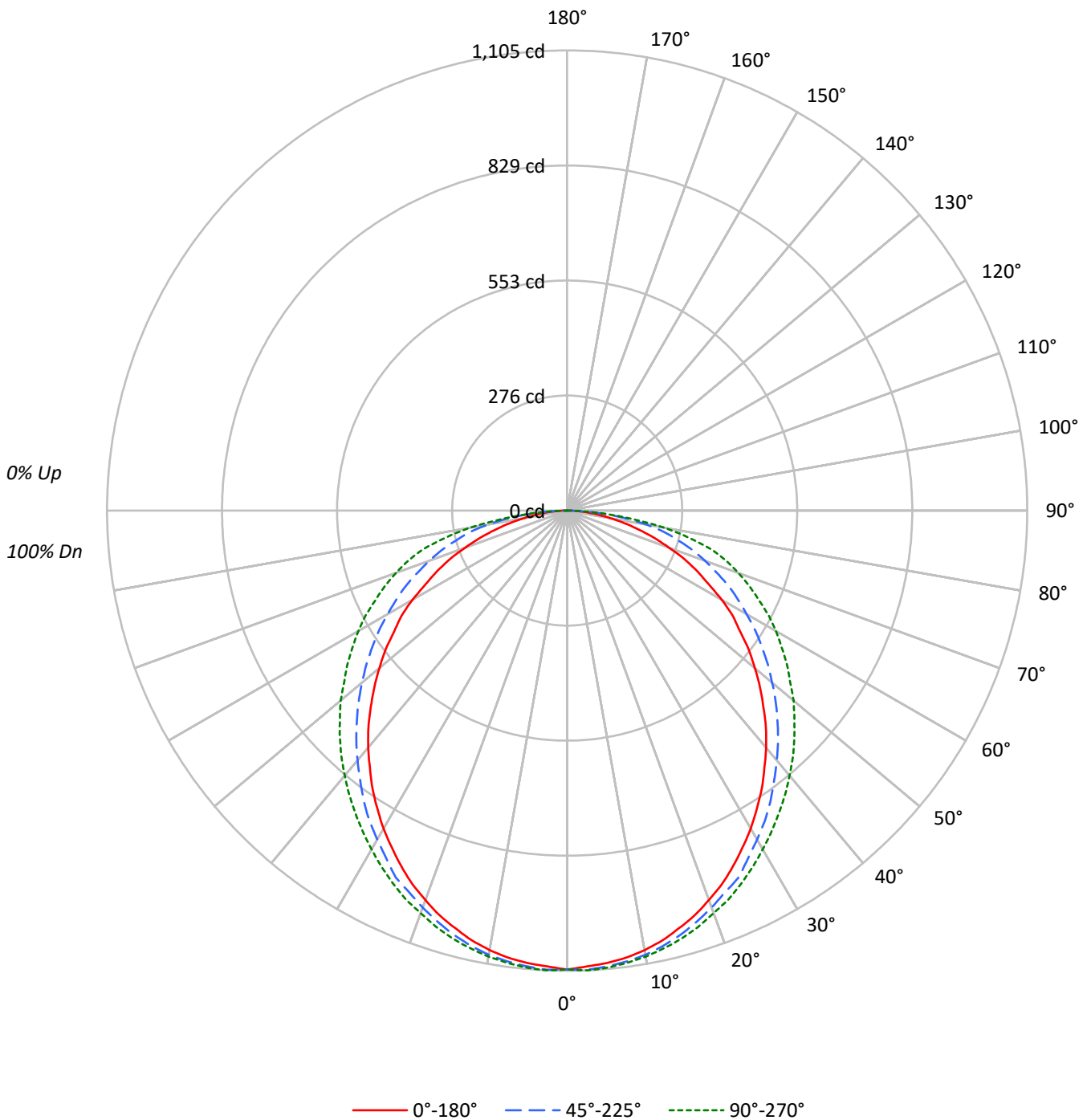
Input Watts (W): 30.504
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2965	2965	2965
5°	2947	2968	2977
10°	2928	2959	2972
15°	2892	2937	2963
20°	2850	2905	2946
25°	2798	2888	2936
30°	2740	2834	2919
35°	2677	2798	2913
40°	2611	2751	2919
45°	2537	2719	2938
50°	2464	2691	2971
55°	2379	2678	3023
60°	2309	2678	3116
65°	2194	2721	3229
70°	2046	2773	3438
75°	1874	2869	3714
80°	1632	2991	3657
85°	1426	2658	2905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.2	3.2
10°-20°	296.8	9.2
20°-30°	445.6	13.7
30°-40°	532.5	16.4
40°-50°	553.7	17.1
50°-60°	513.2	15.8
60°-70°	420.9	13.0
70°-80°	284.6	8.8
80°-90°	89.4	2.8
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°	846.7	26.1
0°-40°	1379.2	42.6
0°-60°	2446.1	75.5
0°-90°	3241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3241.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1102	1102	1102	1102	1102	
5°	1091	1092	1099	1100	1102	104
15°	1038	1043	1054	1060	1064	293
25°	942	950	973	984	989	434
35°	815	826	852	877	887	509
45°	667	679	714	756	772	515
55°	507	523	571	622	644	456
65°	344	364	427	483	507	340
75°	180	210	276	332	357	191
85°	46	64	86	96	94	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1102.0	1102.0	1102.0	1102.0	1102.0
2.5°	1095.6	1098.8	1103.6	1105.2	1105.2
5°	1090.8	1092.4	1098.8	1100.4	1102.0
7.5°	1082.9	1086.1	1092.4	1094.0	1095.6
10°	1071.7	1074.9	1082.9	1086.1	1087.6
12.5°	1057.3	1060.5	1070.1	1074.9	1076.5
15°	1038.2	1043.0	1054.2	1060.5	1063.7
17.5°	1019.1	1023.9	1035.0	1044.6	1047.8
20°	995.1	1006.3	1014.3	1027.0	1028.6
22.5°	971.2	977.6	992.0	1004.7	1011.1
25°	942.5	950.5	972.8	984.0	988.8
27.5°	912.2	923.4	940.9	958.5	964.8
30°	881.9	889.9	912.2	933.0	939.3
32.5°	848.4	859.6	883.5	904.2	913.8
35°	814.9	826.1	851.6	877.1	886.7
37.5°	778.3	791.0	816.5	846.8	859.6
40°	743.2	752.7	783.0	819.7	830.9
42.5°	706.5	717.7	749.6	789.4	802.2
45°	666.6	679.4	714.5	755.9	771.9
47.5°	628.3	641.1	679.4	720.8	740.0
50°	588.5	604.4	642.7	690.5	709.7
52.5°	550.2	564.6	607.6	657.1	674.6
55°	507.1	523.1	570.9	622.0	644.3
57.5°	472.1	483.2	535.8	588.5	610.8
60°	429.0	443.4	497.6	553.4	578.9
62.5°	382.7	406.7	462.5	519.9	545.4
65°	344.5	363.6	427.4	483.2	507.1
67.5°	304.6	325.3	387.5	446.5	473.7
70°	260.0	287.1	352.4	411.5	437.0
72.5°	220.1	248.8	315.8	373.2	400.3
75°	180.2	210.5	275.9	331.7	357.2
77.5°	141.9	175.4	239.2	282.3	298.2
80°	105.3	137.2	193.0	223.3	236.0
82.5°	73.4	100.5	141.9	157.9	161.1
85°	46.2	63.8	86.1	95.7	94.1
87.5°	20.7	25.5	31.9	35.1	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)