

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: P277204

Luminaire Tested: **22CZ2-39HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277204
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-L93050-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: 3369.0 lumens
Efficiency: N/A
Efficacy: 109.0 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

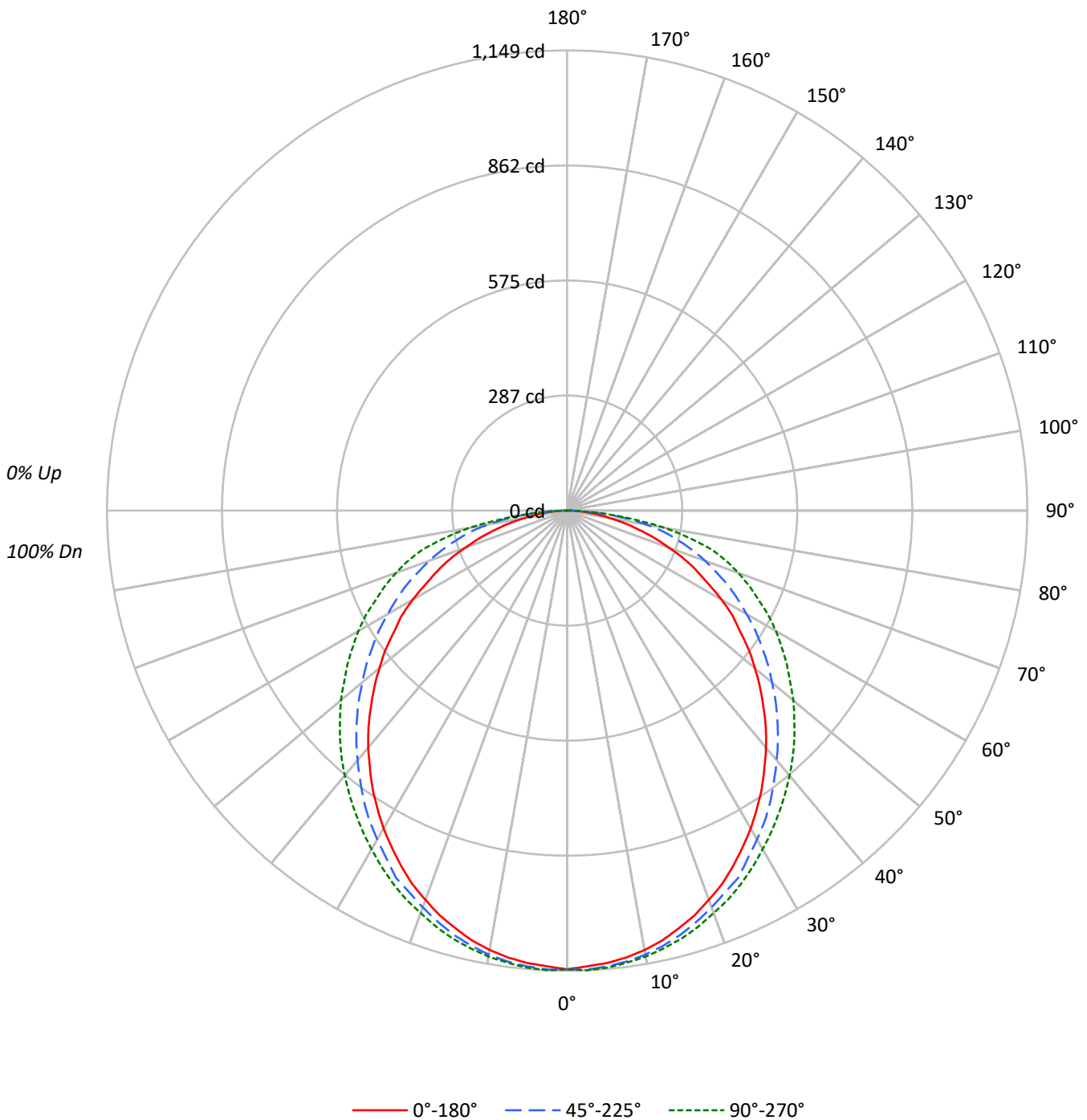
Input Watts (W): 30.915432
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3083	3083	3083
5°	3063	3085	3094
10°	3044	3076	3089
15°	3007	3053	3080
20°	2962	3019	3062
25°	2909	3002	3052
30°	2848	2946	3034
35°	2783	2908	3028
40°	2714	2859	3034
45°	2637	2826	3054
50°	2561	2797	3088
55°	2473	2784	3142
60°	2400	2784	3239
65°	2280	2829	3357
70°	2126	2883	3574
75°	1947	2982	3860
80°	1695	3109	3803
85°	1485	2763	3020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	3.2
10°-20°	308.6	9.2
20°-30°	463.2	13.7
30°-40°	553.5	16.4
40°-50°	575.6	17.1
50°-60°	533.5	15.8
60°-70°	437.6	13.0
70°-80°	295.8	8.8
80°-90°	92.9	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°	880.1	26.1
0°-40°	1433.6	42.6
0°-60°	2542.7	75.5
0°-90°	3369.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1146	1146	1146	1146	1146	
5°	1134	1136	1142	1144	1146	108
15°	1079	1084	1096	1102	1106	304
25°	980	988	1011	1023	1028	451
35°	847	859	885	912	922	529
45°	693	706	743	786	802	535
55°	527	544	594	646	670	474
65°	358	378	444	502	527	354
75°	187	219	287	345	371	199
85°	48	66	90	100	98	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1145.5	1145.5	1145.5	1145.5	1145.5
2.5°	1138.9	1142.2	1147.2	1148.8	1148.8
5°	1133.9	1135.6	1142.2	1143.9	1145.5
7.5°	1125.6	1128.9	1135.6	1137.2	1138.9
10°	1114.0	1117.3	1125.6	1128.9	1130.6
12.5°	1099.1	1102.4	1112.4	1117.3	1119.0
15°	1079.2	1084.2	1095.8	1102.4	1105.7
17.5°	1059.3	1064.3	1075.9	1085.8	1089.2
20°	1034.5	1046.1	1054.3	1067.6	1069.3
22.5°	1009.6	1016.2	1031.1	1044.4	1051.0
25°	979.7	988.0	1011.2	1022.8	1027.8
27.5°	948.2	959.9	978.1	996.3	1003.0
30°	916.7	925.0	948.2	969.8	976.4
32.5°	881.9	893.5	918.4	940.0	949.9
35°	847.1	858.7	885.3	911.8	921.7
37.5°	809.0	822.3	848.8	880.3	893.5
40°	772.5	782.5	814.0	852.1	863.7
42.5°	734.4	746.0	779.2	820.6	833.9
45°	692.9	706.2	742.7	785.8	802.4
47.5°	653.2	666.4	706.2	749.3	769.2
50°	611.7	628.3	668.1	717.8	737.7
52.5°	571.9	586.9	631.6	683.0	701.2
55°	527.2	543.7	593.5	646.5	669.7
57.5°	490.7	502.3	557.0	611.7	634.9
60°	445.9	460.9	517.2	575.2	601.8
62.5°	397.9	422.7	480.8	540.4	567.0
65°	358.1	378.0	444.3	502.3	527.2
67.5°	316.6	338.2	402.8	464.2	492.4
70°	270.2	298.4	366.4	427.7	454.2
72.5°	228.8	258.6	328.2	387.9	416.1
75°	187.3	218.8	286.8	344.8	371.3
77.5°	147.5	182.4	248.7	293.4	310.0
80°	109.4	142.6	200.6	232.1	245.4
82.5°	76.3	104.4	147.5	164.1	167.4
85°	48.1	66.3	89.5	99.5	97.8
87.5°	21.6	26.5	33.2	36.5	34.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)