

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: P277334

Luminaire Tested: **22CZ2-29HE-S-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277334
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-S-UNV-L83050-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2969.0 lumens
Efficiency: N/A
Efficacy: 135.9 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

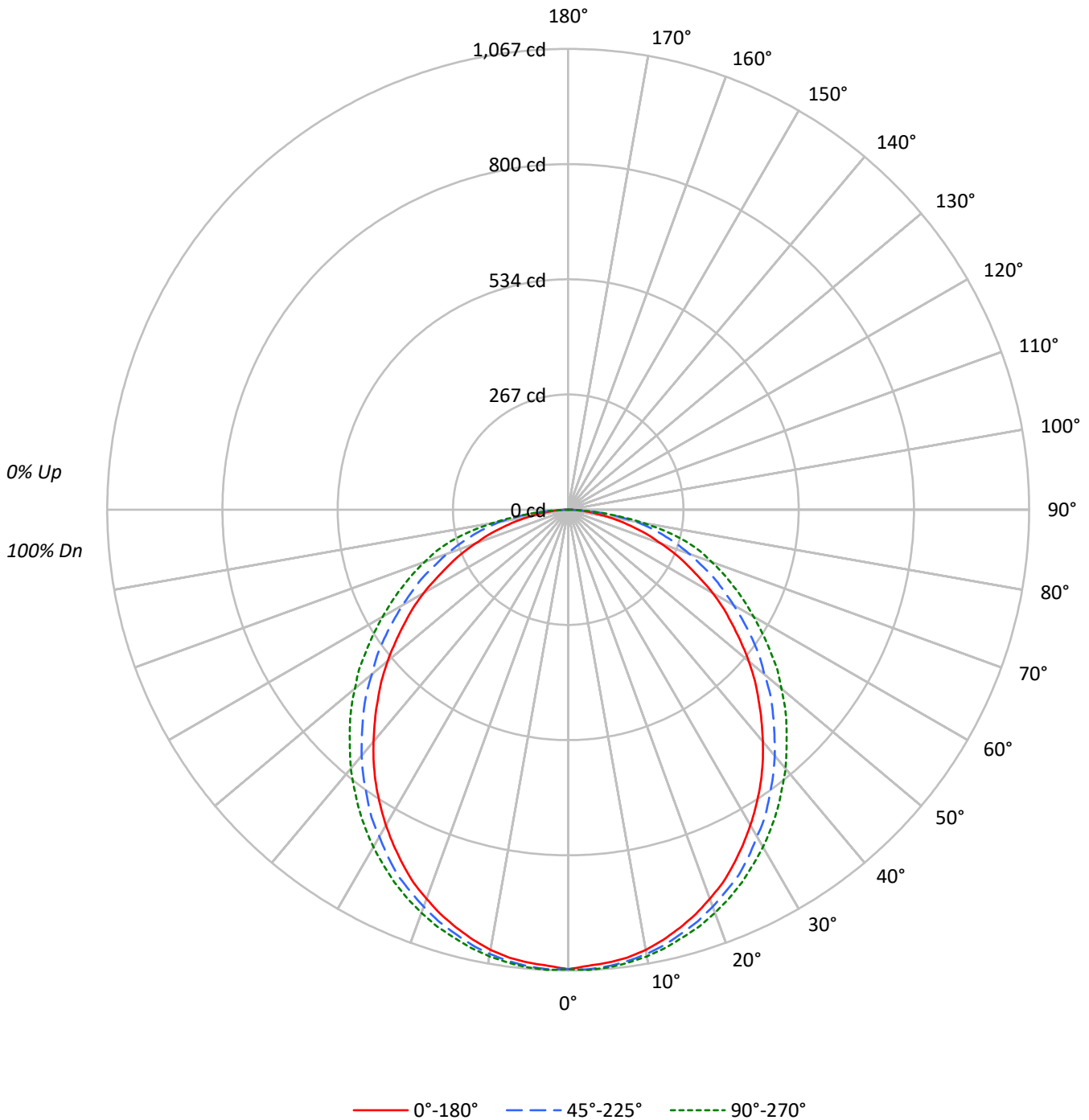
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2863	2863	2863
5°	2844	2866	2874
10°	2828	2854	2869
15°	2790	2829	2856
20°	2745	2801	2844
25°	2690	2772	2826
30°	2621	2716	2802
35°	2548	2667	2776
40°	2462	2613	2749
45°	2372	2552	2720
50°	2285	2482	2696
55°	2177	2437	2677
60°	2080	2378	2669
65°	1941	2364	2699
70°	1788	2343	2779
75°	1613	2377	2924
80°	1395	2447	2748
85°	1155	2053	2053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	3.4
10°-20°	286.3	9.6
20°-30°	428.4	14.4
30°-40°	507.3	17.1
40°-50°	517.0	17.4
50°-60°	463.4	15.6
60°-70°	362.8	12.2
70°-80°	233.9	7.9
80°-90°	69.1	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°	815.3	27.5
0°-40°	1322.7	44.5
0°-60°	2303.1	77.6
0°-90°	2969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2969.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1053	1056	1061	1062	1064	100
15°	1002	1007	1015	1024	1025	282
25°	906	914	934	946	952	417
35°	776	785	812	837	845	485
45°	623	637	670	705	715	481
55°	464	479	520	556	571	416
65°	305	323	371	407	424	303
75°	155	179	229	267	281	166
85°	37	51	66	66	66	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1063.9	1063.9	1063.9	1063.9	1063.9
2.5°	1057.0	1059.7	1065.3	1066.7	1066.7
5°	1052.8	1055.6	1061.1	1062.5	1063.9
7.5°	1045.9	1047.3	1054.2	1057.0	1058.3
10°	1034.8	1037.6	1044.5	1048.6	1050.0
12.5°	1019.6	1023.7	1032.0	1037.6	1039.0
15°	1001.5	1007.1	1015.4	1023.7	1025.1
17.5°	982.2	987.7	998.8	1008.5	1011.2
20°	958.6	965.5	978.0	989.1	993.2
22.5°	935.1	940.6	955.8	969.7	973.8
25°	906.0	914.3	933.7	946.1	951.7
27.5°	875.5	885.2	904.6	921.2	926.7
30°	843.6	853.3	874.1	894.9	901.8
32.5°	810.4	821.5	846.4	867.2	874.1
35°	775.7	785.4	811.8	836.7	845.0
37.5°	739.7	748.0	778.5	804.8	813.2
40°	700.9	712.0	743.9	774.4	782.7
42.5°	662.2	674.6	706.5	739.7	748.0
45°	623.4	637.2	670.5	705.1	714.8
47.5°	586.0	597.1	634.5	667.7	681.6
50°	545.8	556.9	592.9	630.3	644.1
52.5°	504.2	519.5	558.3	594.3	610.9
55°	464.1	479.3	519.5	555.5	570.7
57.5°	426.7	439.1	480.7	518.1	533.3
60°	386.5	397.6	441.9	482.1	495.9
62.5°	343.5	360.2	405.9	443.3	459.9
65°	304.8	322.8	371.3	407.3	423.9
67.5°	268.7	285.4	332.5	371.3	389.3
70°	227.2	249.3	297.8	336.6	353.2
72.5°	193.9	213.3	263.2	302.0	320.0
75°	155.1	178.7	228.6	267.4	281.2
77.5°	123.3	146.8	193.9	224.4	231.3
80°	90.0	113.6	157.9	173.2	177.3
82.5°	61.0	83.1	113.6	117.7	119.1
85°	37.4	51.3	66.5	66.5	66.5
87.5°	18.0	20.8	23.5	22.2	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)