

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: P277457

Luminaire Tested: **22CZ2-29HE-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277457
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-L92765-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2590.0 lumens
Efficiency: N/A
Efficacy: 121.6 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

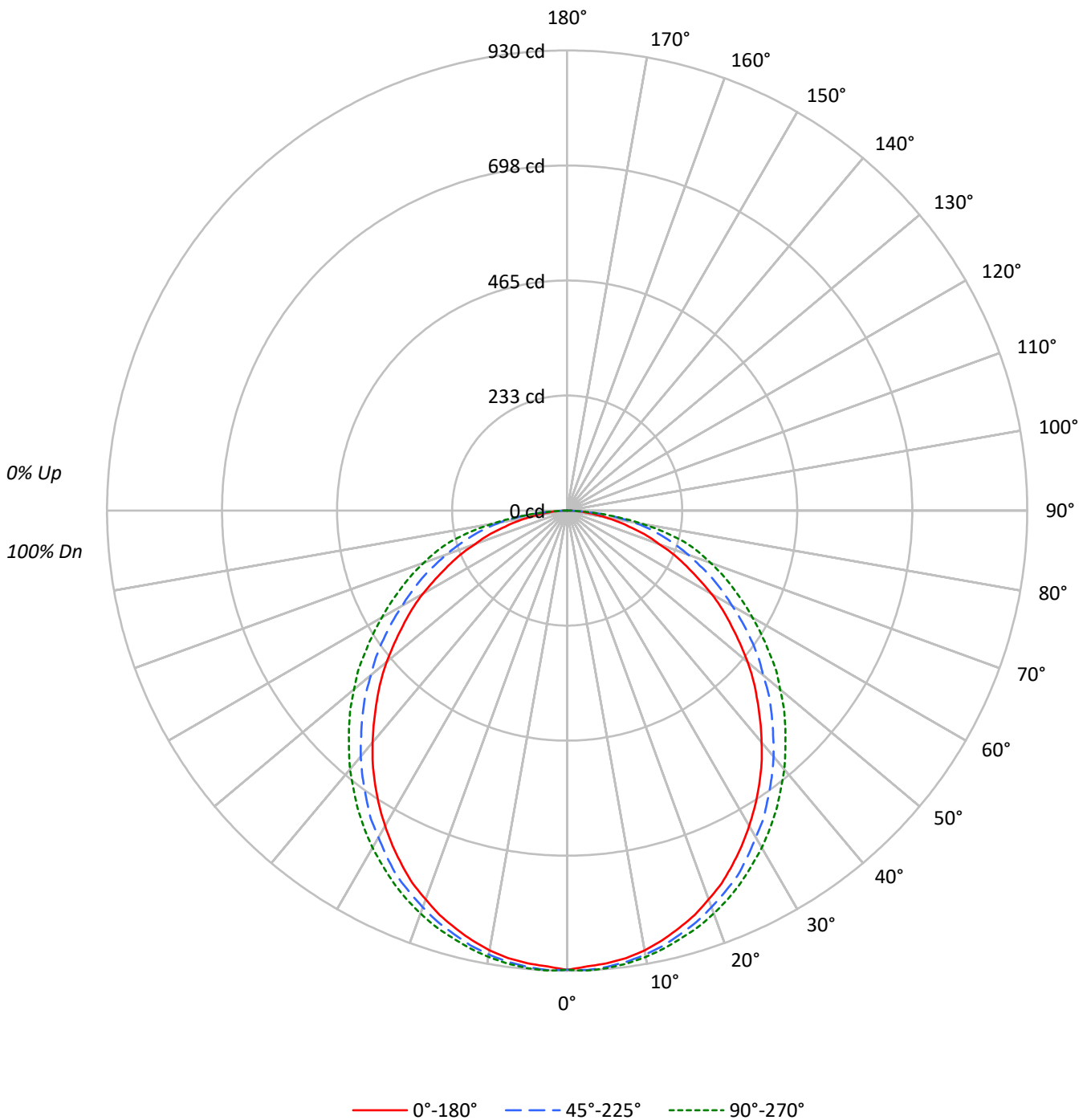
Input Watts (W): 21.297
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2497	2497	2497
5°	2481	2501	2507
10°	2467	2490	2503
15°	2434	2468	2491
20°	2395	2443	2481
25°	2347	2418	2465
30°	2287	2369	2444
35°	2223	2326	2421
40°	2148	2279	2399
45°	2069	2226	2373
50°	1993	2165	2352
55°	1899	2126	2336
60°	1815	2075	2328
65°	1693	2062	2355
70°	1559	2044	2425
75°	1407	2073	2550
80°	1216	2135	2397
85°	1007	1791	1791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	3.4
10°-20°	249.8	9.6
20°-30°	373.7	14.4
30°-40°	442.6	17.1
40°-50°	451.0	17.4
50°-60°	404.3	15.6
60°-70°	316.5	12.2
70°-80°	204.1	7.9
80°-90°	60.3	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°	711.2	27.5
0°-40°	1153.8	44.5
0°-60°	2009.1	77.6
0°-90°	2590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2590.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	918	921	926	927	928	87
15°	874	878	886	893	894	246
25°	790	798	814	825	830	364
35°	677	685	708	730	737	423
45°	544	556	585	615	624	420
55°	405	418	453	485	498	363
65°	266	282	324	355	370	264
75°	135	156	199	233	245	145
85°	33	45	58	58	58	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.1	928.1	928.1	928.1	928.1
2.5°	922.0	924.5	929.3	930.5	930.5
5°	918.4	920.8	925.7	926.9	928.1
7.5°	912.4	913.6	919.6	922.0	923.2
10°	902.7	905.1	911.2	914.8	916.0
12.5°	889.4	893.0	900.3	905.1	906.3
15°	873.7	878.5	885.8	893.0	894.2
17.5°	856.8	861.6	871.3	879.7	882.2
20°	836.2	842.3	853.2	862.8	866.4
22.5°	815.7	820.5	833.8	845.9	849.5
25°	790.3	797.6	814.5	825.4	830.2
27.5°	763.7	772.2	789.1	803.6	808.4
30°	735.9	744.4	762.5	780.6	786.7
32.5°	706.9	716.6	738.4	756.5	762.5
35°	676.7	685.2	708.1	729.9	737.1
37.5°	645.3	652.6	679.1	702.1	709.4
40°	611.5	621.1	648.9	675.5	682.8
42.5°	577.6	588.5	616.3	645.3	652.6
45°	543.8	555.9	584.9	615.1	623.6
47.5°	511.2	520.8	553.5	582.5	594.5
50°	476.1	485.8	517.2	549.8	561.9
52.5°	439.9	453.2	487.0	518.4	532.9
55°	404.8	418.1	453.2	484.6	497.9
57.5°	372.2	383.1	419.3	452.0	465.2
60°	337.2	346.8	385.5	420.5	432.6
62.5°	299.7	314.2	354.1	386.7	401.2
65°	265.9	281.6	323.9	355.3	369.8
67.5°	234.4	248.9	290.0	323.9	339.6
70°	198.2	217.5	259.8	293.6	308.2
72.5°	169.2	186.1	229.6	263.4	279.1
75°	135.3	155.9	199.4	233.2	245.3
77.5°	107.6	128.1	169.2	195.8	201.8
80°	78.5	99.1	137.8	151.1	154.7
82.5°	53.2	72.5	99.1	102.7	103.9
85°	32.6	44.7	58.0	58.0	58.0
87.5°	15.7	18.1	20.5	19.3	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)