

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: P277234

Luminaire Tested: **22CZ2-29HE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277234
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: 22CZ2-29HE-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2698.0 lumens
Efficiency: N/A
Efficacy: 127.2 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

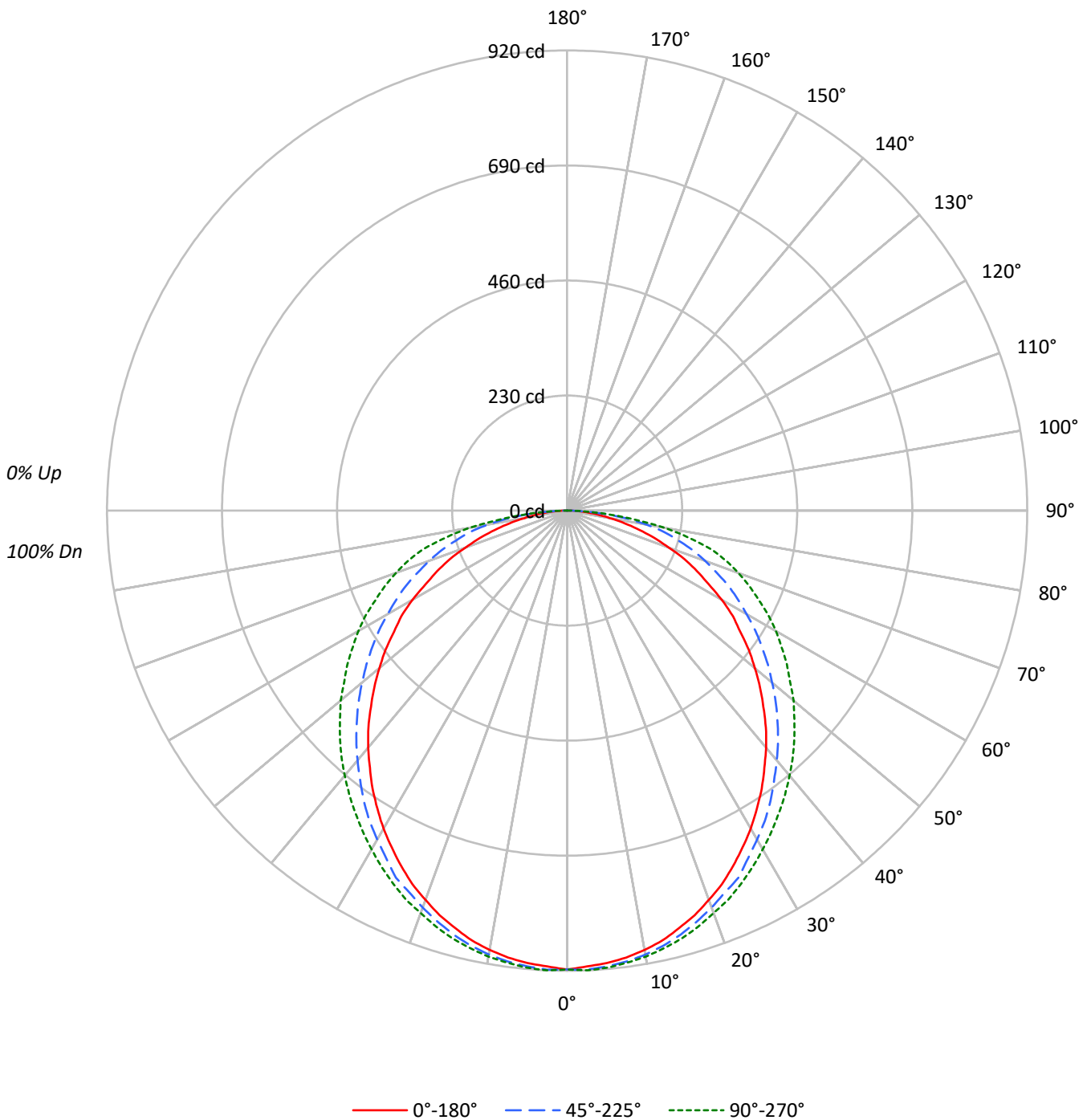
Input Watts (W): 21.204
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2469	2469	2469
5°	2453	2471	2478
10°	2438	2463	2474
15°	2408	2445	2467
20°	2372	2418	2452
25°	2330	2404	2444
30°	2281	2360	2430
35°	2229	2329	2425
40°	2173	2290	2430
45°	2112	2264	2445
50°	2051	2240	2473
55°	1981	2230	2516
60°	1922	2229	2594
65°	1826	2266	2688
70°	1703	2308	2862
75°	1560	2388	3092
80°	1358	2489	3045
85°	1189	2214	2418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	3.2
10°-20°	247.1	9.2
20°-30°	371.0	13.7
30°-40°	443.3	16.4
40°-50°	460.9	17.1
50°-60°	427.2	15.8
60°-70°	350.4	13.0
70°-80°	236.9	8.8
80°-90°	74.4	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°	704.8	26.1
0°-40°	1148.1	42.6
0°-60°	2036.3	75.5
0°-90°	2698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	908	909	915	916	917	86
15°	864	868	878	883	886	244
25°	785	791	810	819	823	361
35°	678	688	709	730	738	424
45°	555	566	595	629	643	429
55°	422	436	475	518	536	379
65°	287	303	356	402	422	283
75°	150	175	230	276	297	159
85°	38	53	72	80	78	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	917.4	917.4	917.4	917.4	917.4
2.5°	912.1	914.7	918.7	920.0	920.0
5°	908.1	909.4	914.7	916.0	917.4
7.5°	901.4	904.1	909.4	910.7	912.1
10°	892.1	894.8	901.4	904.1	905.4
12.5°	880.2	882.9	890.8	894.8	896.1
15°	864.3	868.2	877.5	882.9	885.5
17.5°	848.3	852.3	861.6	869.6	872.2
20°	828.4	837.7	844.4	855.0	856.3
22.5°	808.5	813.8	825.8	836.4	841.7
25°	784.6	791.2	809.8	819.1	823.1
27.5°	759.4	768.7	783.3	797.9	803.2
30°	734.2	740.8	759.4	776.6	782.0
32.5°	706.3	715.6	735.5	752.7	760.7
35°	678.4	687.7	708.9	730.2	738.1
37.5°	647.9	658.5	679.7	705.0	715.6
40°	618.7	626.6	651.9	682.4	691.7
42.5°	588.1	597.4	624.0	657.2	667.8
45°	554.9	565.6	594.8	629.3	642.6
47.5°	523.1	533.7	565.6	600.1	616.0
50°	489.9	503.2	535.0	574.8	590.8
52.5°	458.0	470.0	505.8	547.0	561.6
55°	422.2	435.5	475.3	517.8	536.3
57.5°	393.0	402.3	446.1	489.9	508.5
60°	357.1	369.1	414.2	460.7	481.9
62.5°	318.6	338.5	385.0	432.8	454.0
65°	286.8	302.7	355.8	402.3	422.2
67.5°	253.6	270.8	322.6	371.7	394.3
70°	216.4	239.0	293.4	342.5	363.8
72.5°	183.2	207.1	262.9	310.7	333.2
75°	150.0	175.2	229.7	276.1	297.4
77.5°	118.2	146.0	199.1	235.0	248.3
80°	87.6	114.2	160.6	185.9	196.5
82.5°	61.1	83.6	118.2	131.4	134.1
85°	38.5	53.1	71.7	79.7	78.3
87.5°	17.3	21.2	26.6	29.2	27.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)