

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: P277362

Luminaire Tested: **22CZ2-29HE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277362
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-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2571.9 lumens
Efficiency: N/A
Efficacy: 120.3 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

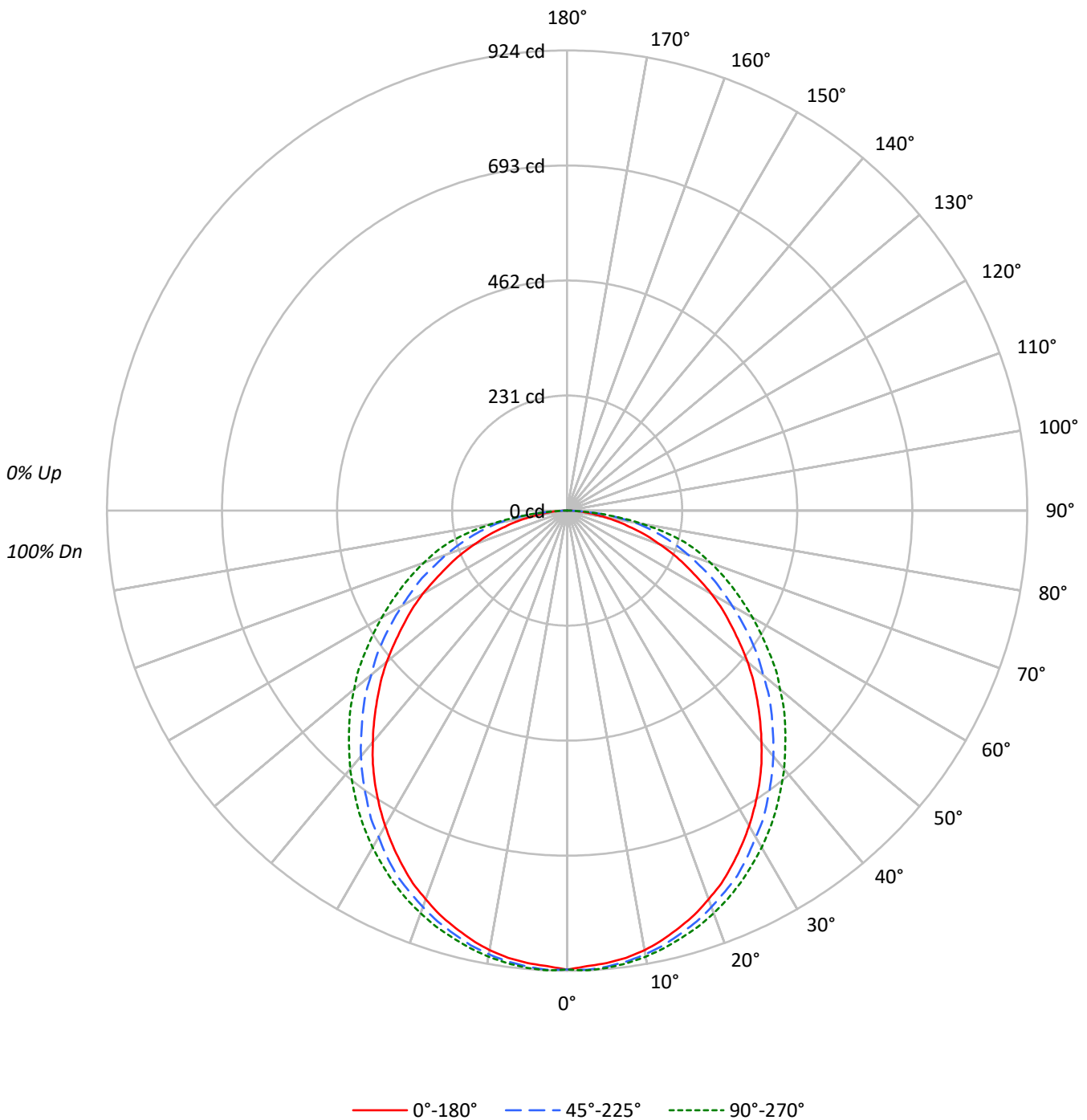
Input Watts (W): 21.373632
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2480	2480	2480
5°	2464	2483	2489
10°	2449	2472	2485
15°	2417	2450	2474
20°	2378	2426	2464
25°	2330	2401	2448
30°	2271	2353	2427
35°	2208	2310	2405
40°	2133	2264	2382
45°	2055	2210	2356
50°	1979	2150	2336
55°	1886	2111	2320
60°	1802	2060	2312
65°	1681	2048	2338
70°	1548	2030	2408
75°	1397	2059	2533
80°	1209	2120	2380
85°	1000	1778	1778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	3.4
10°-20°	248.0	9.6
20°-30°	371.1	14.4
30°-40°	439.5	17.1
40°-50°	447.9	17.4
50°-60°	401.4	15.6
60°-70°	314.3	12.2
70°-80°	202.7	7.9
80°-90°	59.9	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°	706.3	27.5
0°-40°	1145.8	44.5
0°-60°	1995.1	77.6
0°-90°	2571.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2571.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	912	914	919	920	922	87
15°	868	872	880	887	888	245
25°	785	792	809	820	824	361
35°	672	680	703	725	732	420
45°	540	552	581	611	619	417
55°	402	415	450	481	494	360
65°	264	280	322	353	367	262
75°	134	155	198	232	244	144
85°	32	44	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°	921.6	921.6	921.6	921.6	921.6
2.5°	915.6	918.0	922.8	924.0	924.0
5°	912.0	914.4	919.2	920.4	921.6
7.5°	906.0	907.2	913.2	915.6	916.8
10°	896.4	898.8	904.8	908.4	909.6
12.5°	883.2	886.8	894.0	898.8	900.0
15°	867.6	872.4	879.6	886.8	888.0
17.5°	850.8	855.6	865.2	873.6	876.0
20°	830.4	836.4	847.2	856.8	860.4
22.5°	810.0	814.8	828.0	840.0	843.6
25°	784.8	792.0	808.8	819.6	824.4
27.5°	758.4	766.8	783.6	798.0	802.8
30°	730.8	739.2	757.2	775.2	781.2
32.5°	702.0	711.6	733.2	751.2	757.2
35°	672.0	680.4	703.2	724.8	732.0
37.5°	640.8	648.0	674.4	697.2	704.4
40°	607.2	616.8	644.4	670.8	678.0
42.5°	573.6	584.4	612.0	640.8	648.0
45°	540.0	552.0	580.8	610.8	619.2
47.5°	507.6	517.2	549.6	578.4	590.4
50°	472.8	482.4	513.6	546.0	558.0
52.5°	436.8	450.0	483.6	514.8	529.2
55°	402.0	415.2	450.0	481.2	494.4
57.5°	369.6	380.4	416.4	448.8	462.0
60°	334.8	344.4	382.8	417.6	429.6
62.5°	297.6	312.0	351.6	384.0	398.4
65°	264.0	279.6	321.6	352.8	367.2
67.5°	232.8	247.2	288.0	321.6	337.2
70°	196.8	216.0	258.0	291.6	306.0
72.5°	168.0	184.8	228.0	261.6	277.2
75°	134.4	154.8	198.0	231.6	243.6
77.5°	106.8	127.2	168.0	194.4	200.4
80°	78.0	98.4	136.8	150.0	153.6
82.5°	52.8	72.0	98.4	102.0	103.2
85°	32.4	44.4	57.6	57.6	57.6
87.5°	15.6	18.0	20.4	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)