

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: P277360

Luminaire Tested: **22CZ2-29HE-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277360
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-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2179.0 lumens
Efficiency: N/A
Efficacy: 102.2 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

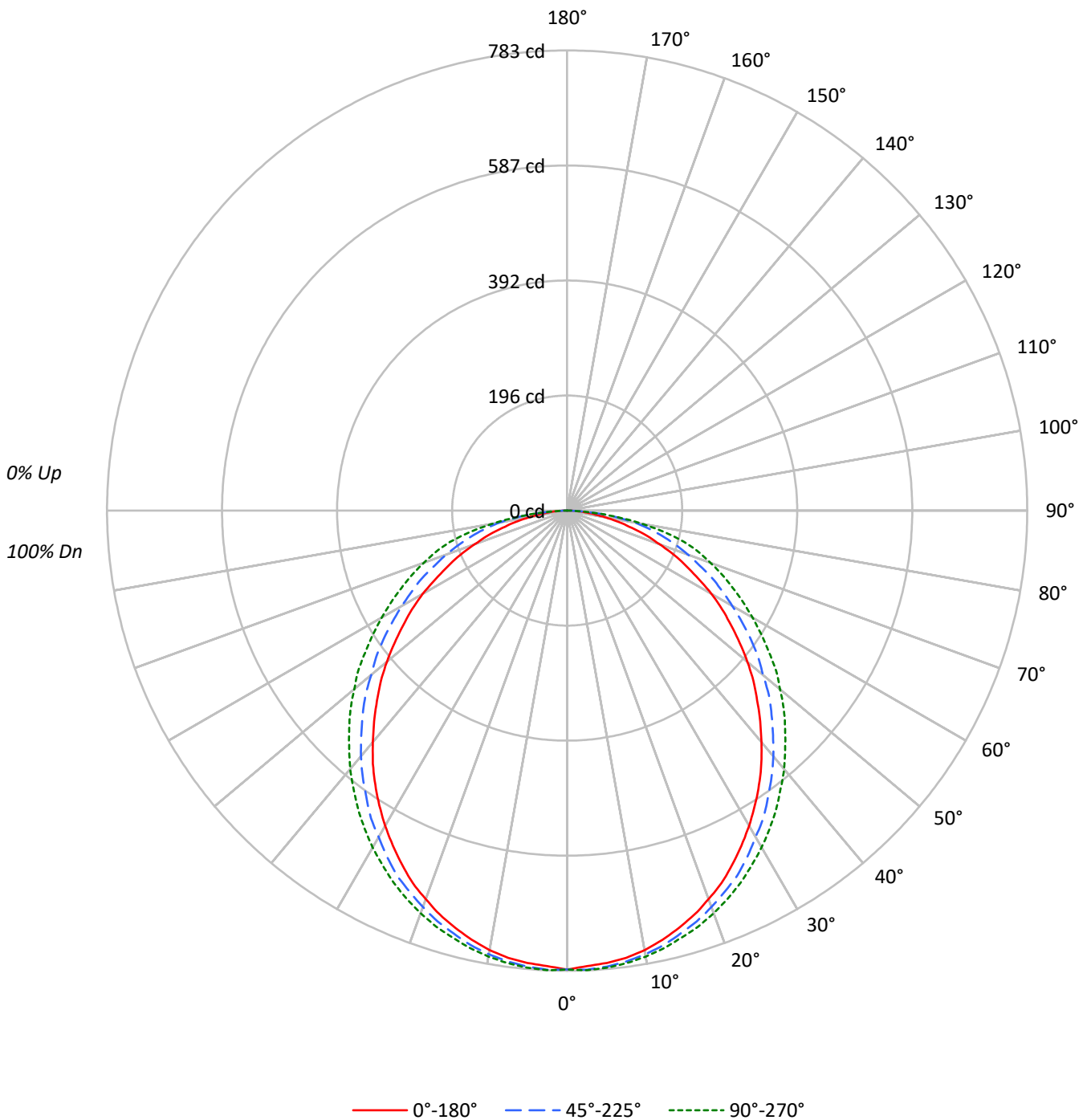
Input Watts (W): 21.311136
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2101	2101	2101
5°	2087	2104	2109
10°	2075	2095	2106
15°	2048	2076	2096
20°	2015	2056	2088
25°	1974	2034	2074
30°	1924	1993	2057
35°	1870	1957	2037
40°	1807	1918	2018
45°	1741	1873	1996
50°	1677	1822	1979
55°	1598	1789	1965
60°	1527	1745	1959
65°	1424	1735	1981
70°	1312	1720	2040
75°	1184	1745	2146
80°	1024	1796	2016
85°	849	1507	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	3.4
10°-20°	210.1	9.6
20°-30°	314.4	14.4
30°-40°	372.4	17.1
40°-50°	379.5	17.4
50°-60°	340.1	15.6
60°-70°	266.3	12.2
70°-80°	171.7	7.9
80°-90°	50.7	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°	598.4	27.5
0°-40°	970.7	44.5
0°-60°	1690.3	77.6
0°-90°	2179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	773	775	779	780	781	73
15°	735	739	745	751	752	207
25°	665	671	685	694	698	306
35°	569	576	596	614	620	356
45°	458	468	492	518	525	353
55°	341	352	381	408	419	305
65°	224	237	272	299	311	222
75°	114	131	168	196	206	122
85°	28	38	49	49	49	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	780.8	780.8	780.8	780.8	780.8
2.5°	775.7	777.8	781.8	782.8	782.8
5°	772.7	774.7	778.8	779.8	780.8
7.5°	767.6	768.6	773.7	775.7	776.7
10°	759.5	761.5	766.6	769.6	770.6
12.5°	748.3	751.3	757.4	761.5	762.5
15°	735.1	739.1	745.2	751.3	752.3
17.5°	720.8	724.9	733.0	740.1	742.2
20°	703.5	708.6	717.8	725.9	729.0
22.5°	686.3	690.3	701.5	711.7	714.7
25°	664.9	671.0	685.2	694.4	698.5
27.5°	642.5	649.7	663.9	676.1	680.2
30°	619.2	626.3	641.5	656.8	661.9
32.5°	594.8	602.9	621.2	636.4	641.5
35°	569.3	576.5	595.8	614.1	620.2
37.5°	542.9	549.0	571.4	590.7	596.8
40°	514.4	522.6	546.0	568.3	574.4
42.5°	486.0	495.1	518.5	542.9	549.0
45°	457.5	467.7	492.1	517.5	524.6
47.5°	430.1	438.2	465.6	490.0	500.2
50°	400.6	408.7	435.1	462.6	472.8
52.5°	370.1	381.3	409.7	436.2	448.4
55°	340.6	351.8	381.3	407.7	418.9
57.5°	313.1	322.3	352.8	380.2	391.4
60°	283.7	291.8	324.3	353.8	364.0
62.5°	252.1	264.3	297.9	325.3	337.5
65°	223.7	236.9	272.5	298.9	311.1
67.5°	197.2	209.4	244.0	272.5	285.7
70°	166.7	183.0	218.6	247.1	259.3
72.5°	142.3	156.6	193.2	221.6	234.9
75°	113.9	131.2	167.8	196.2	206.4
77.5°	90.5	107.8	142.3	164.7	169.8
80°	66.1	83.4	115.9	127.1	130.1
82.5°	44.7	61.0	83.4	86.4	87.4
85°	27.5	37.6	48.8	48.8	48.8
87.5°	13.2	15.3	17.3	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)