

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: P277187

Luminaire Tested: **22CZ2-24HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277187
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: 22CZ2-24HE-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1767.0 lumens
Efficiency: N/A
Efficacy: 98.3 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

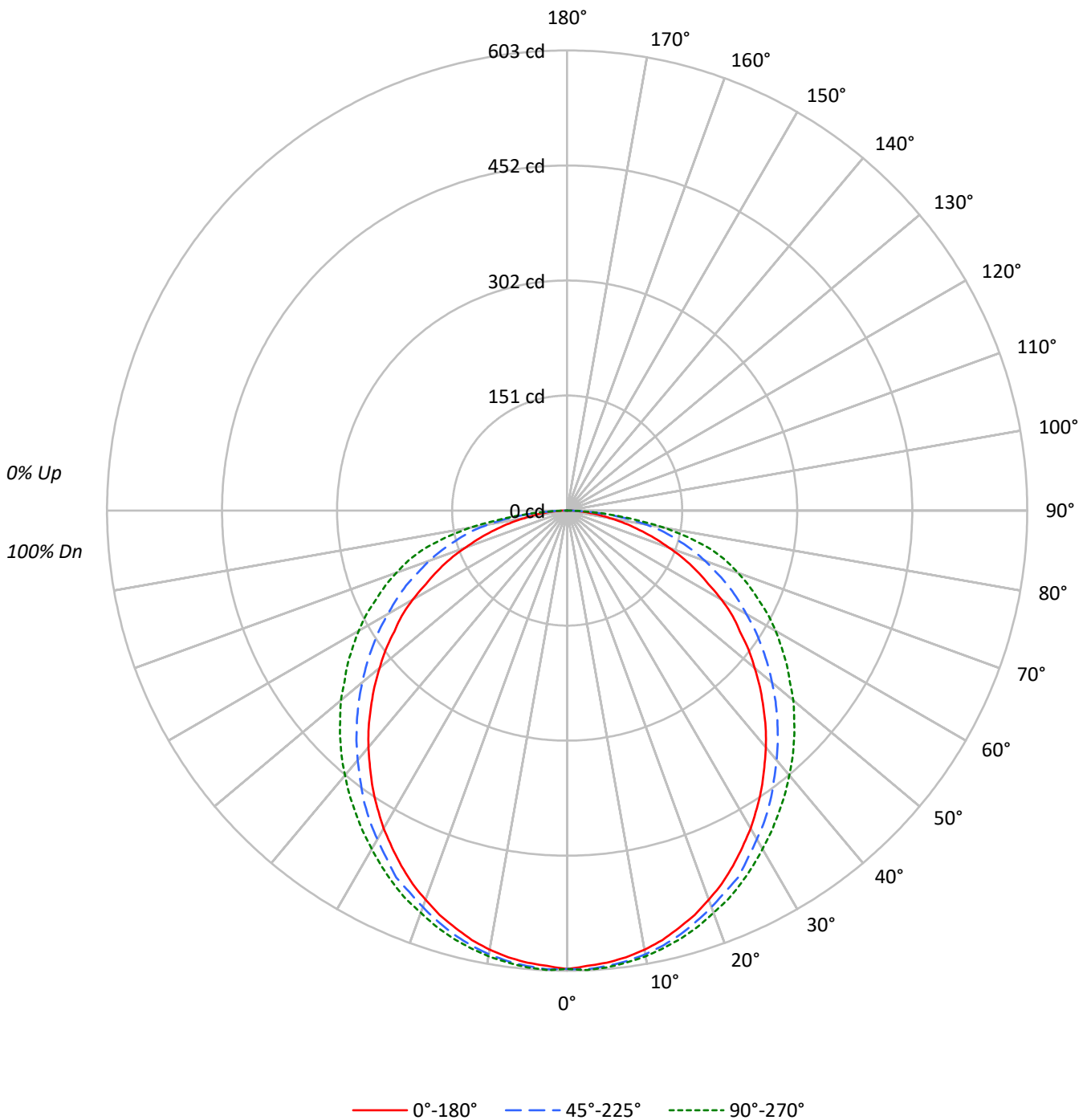
Input Watts (W): 17.981271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1617	1617	1617
5°	1606	1618	1623
10°	1597	1613	1620
15°	1577	1601	1616
20°	1554	1584	1606
25°	1526	1575	1601
30°	1494	1545	1591
35°	1460	1525	1588
40°	1423	1500	1591
45°	1383	1482	1601
50°	1343	1467	1620
55°	1297	1460	1648
60°	1259	1460	1699
65°	1196	1484	1761
70°	1115	1512	1874
75°	1022	1564	2025
80°	890	1630	1994
85°	778	1451	1584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	3.2
10°-20°	161.8	9.2
20°-30°	243.0	13.7
30°-40°	290.3	16.4
40°-50°	301.9	17.1
50°-60°	279.8	15.8
60°-70°	229.5	13.0
70°-80°	155.1	8.8
80°-90°	48.8	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°	461.6	26.1
0°-40°	751.9	42.6
0°-60°	1333.6	75.5
0°-90°	1767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	595	596	599	600	601	56
15°	566	569	575	578	580	160
25°	514	518	530	536	539	237
35°	444	450	464	478	483	278
45°	363	370	390	412	421	281
55°	276	285	311	339	351	249
65°	188	198	233	264	276	186
75°	98	115	150	181	195	104
85°	25	35	47	52	51	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.8	600.8	600.8	600.8	600.8
2.5°	597.3	599.1	601.7	602.6	602.6
5°	594.7	595.6	599.1	599.9	600.8
7.5°	590.4	592.1	595.6	596.5	597.3
10°	584.3	586.0	590.4	592.1	593.0
12.5°	576.5	578.2	583.4	586.0	586.9
15°	566.0	568.6	574.7	578.2	579.9
17.5°	555.6	558.2	564.3	569.5	571.3
20°	542.6	548.6	553.0	559.9	560.8
22.5°	529.5	533.0	540.8	547.8	551.3
25°	513.9	518.2	530.4	536.5	539.1
27.5°	497.3	503.4	513.0	522.6	526.0
30°	480.8	485.2	497.3	508.6	512.1
32.5°	462.6	468.7	481.7	493.0	498.2
35°	444.3	450.4	464.3	478.2	483.4
37.5°	424.3	431.3	445.2	461.7	468.7
40°	405.2	410.4	426.9	446.9	453.0
42.5°	385.2	391.3	408.7	430.4	437.3
45°	363.4	370.4	389.5	412.1	420.8
47.5°	342.6	349.5	370.4	393.0	403.4
50°	320.8	329.5	350.4	376.5	386.9
52.5°	300.0	307.8	331.3	358.2	367.8
55°	276.5	285.2	311.3	339.1	351.3
57.5°	257.4	263.5	292.1	320.8	333.0
60°	233.9	241.7	271.3	301.7	315.6
62.5°	208.7	221.7	252.1	283.5	297.4
65°	187.8	198.2	233.0	263.5	276.5
67.5°	166.1	177.4	211.3	243.5	258.2
70°	141.7	156.5	192.2	224.3	238.2
72.5°	120.0	135.6	172.2	203.5	218.2
75°	98.3	114.8	150.4	180.9	194.8
77.5°	77.4	95.6	130.4	153.9	162.6
80°	57.4	74.8	105.2	121.7	128.7
82.5°	40.0	54.8	77.4	86.1	87.8
85°	25.2	34.8	47.0	52.2	51.3
87.5°	11.3	13.9	17.4	19.1	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)