

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: P277520

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277520
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-RDP-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1237.0 lumens
Efficiency: N/A
Efficacy: 77.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

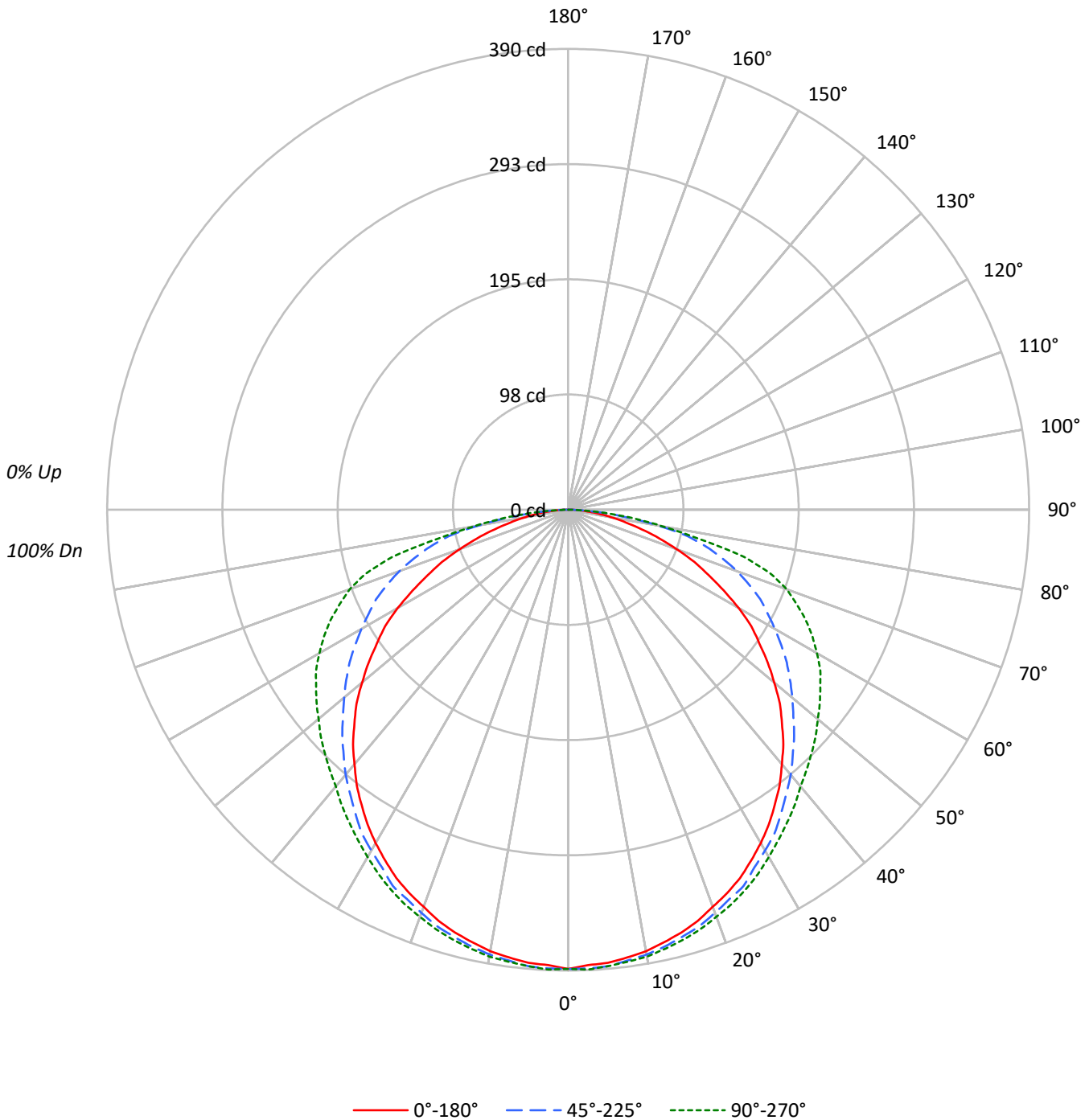
Input Watts (W): 15.934806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1046	1046	1046
5°	1040	1047	1047
10°	1037	1044	1049
15°	1032	1042	1049
20°	1024	1040	1050
25°	1021	1043	1054
30°	1012	1035	1055
35°	1001	1031	1061
40°	988	1029	1074
45°	973	1029	1108
50°	952	1036	1154
55°	927	1059	1221
60°	896	1087	1308
65°	834	1142	1414
70°	766	1196	1547
75°	672	1258	1599
80°	578	1198	1255
85°	506	871	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	3.0
10°-20°	105.5	8.5
20°-30°	161.0	13.0
30°-40°	196.6	15.9
40°-50°	210.2	17.0
50°-60°	202.9	16.4
60°-70°	174.7	14.1
70°-80°	118.2	9.6
80°-90°	31.2	2.5
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°	303.3	24.5
0°-40°	499.9	40.4
0°-60°	913.0	73.8
0°-90°	1237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	385	386	388	388	388	37
15°	370	371	374	376	377	104
25°	344	346	351	353	355	158
35°	305	308	314	320	323	191
45°	256	260	270	284	291	197
55°	198	204	226	248	260	177
65°	131	144	179	208	222	130
75°	65	86	121	146	154	69
85°	16	23	28	29	31	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	388.6	388.6	388.6	388.6	388.6
2.5°	385.8	386.7	388.6	388.6	389.5
5°	384.9	385.8	387.7	387.7	387.7
7.5°	382.2	383.1	384.9	385.8	385.8
10°	379.5	380.4	382.2	383.1	384.0
12.5°	374.9	375.8	378.6	380.4	380.4
15°	370.4	371.3	374.0	375.8	376.7
17.5°	364.9	366.7	369.5	371.3	372.2
20°	357.6	359.4	363.1	365.8	366.7
22.5°	351.3	353.1	356.7	359.4	361.3
25°	344.0	345.8	351.3	353.1	354.9
27.5°	334.9	336.7	341.2	344.9	347.6
30°	325.8	327.6	333.1	337.6	339.4
32.5°	315.8	318.5	324.9	328.5	331.2
35°	304.8	307.6	313.9	320.3	323.0
37.5°	293.9	296.7	303.0	311.2	314.9
40°	281.2	284.8	293.0	303.9	305.8
42.5°	269.4	273.9	281.2	293.9	298.5
45°	255.7	260.3	270.3	283.9	291.2
47.5°	243.0	247.5	258.4	274.8	283.9
50°	227.5	233.9	247.5	266.6	275.7
52.5°	212.9	218.4	236.6	257.5	268.4
55°	197.5	203.8	225.7	248.4	260.3
57.5°	183.8	189.3	213.8	239.3	253.0
60°	166.5	173.8	202.0	229.3	243.0
62.5°	148.3	159.2	190.2	218.4	233.0
65°	131.0	143.8	179.3	207.5	222.0
67.5°	115.6	129.2	165.6	195.6	209.3
70°	97.4	114.7	152.0	181.1	196.6
72.5°	81.0	100.1	136.5	165.6	179.3
75°	64.6	85.5	121.0	145.6	153.8
77.5°	50.0	70.1	103.7	111.0	111.9
80°	37.3	55.5	77.3	78.3	81.0
82.5°	25.5	39.1	50.0	54.6	55.5
85°	16.4	22.7	28.2	29.1	30.9
87.5°	7.3	8.2	10.0	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)