

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: P277322

Luminaire Tested: **22CZ2-20HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277322
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: 22CZ2-20HE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2229.0 lumens
Efficiency: N/A
Efficacy: 140.2 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

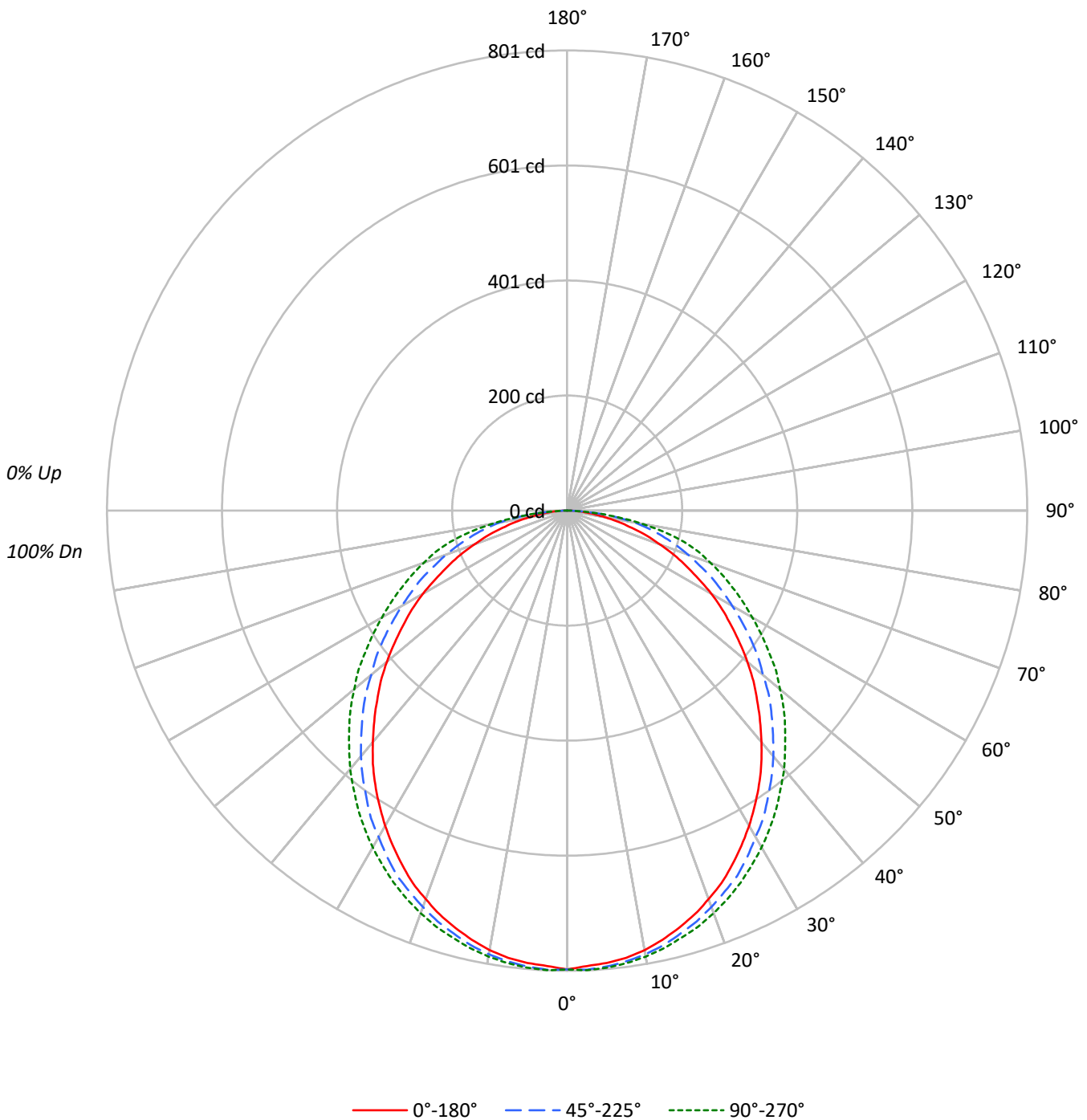
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2149	2149	2149
5°	2135	2152	2157
10°	2123	2143	2154
15°	2095	2124	2144
20°	2061	2103	2135
25°	2020	2081	2121
30°	1968	2039	2104
35°	1913	2002	2084
40°	1848	1962	2064
45°	1781	1916	2042
50°	1716	1863	2025
55°	1635	1830	2010
60°	1562	1786	2004
65°	1457	1775	2026
70°	1342	1759	2087
75°	1211	1784	2195
80°	1048	1838	2063
85°	868	1541	1541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	3.4
10°-20°	215.0	9.6
20°-30°	321.6	14.4
30°-40°	380.9	17.1
40°-50°	388.2	17.4
50°-60°	347.9	15.6
60°-70°	272.4	12.2
70°-80°	175.6	7.9
80°-90°	51.9	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°	612.1	27.5
0°-40°	993.0	44.5
0°-60°	1729.1	77.6
0°-90°	2229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2229.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	790	792	797	798	799	75
15°	752	756	762	769	770	212
25°	680	686	701	710	714	313
35°	582	590	609	628	634	364
45°	468	478	503	529	537	361
55°	348	360	390	417	428	312
65°	229	242	279	306	318	227
75°	116	134	172	201	211	125
85°	28	38	50	50	50	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.7	798.7	798.7	798.7	798.7
2.5°	793.5	795.6	799.8	800.8	800.8
5°	790.4	792.5	796.6	797.7	798.7
7.5°	785.2	786.2	791.4	793.5	794.6
10°	776.9	779.0	784.2	787.3	788.3
12.5°	765.4	768.6	774.8	779.0	780.0
15°	751.9	756.1	762.3	768.6	769.6
17.5°	737.4	741.5	749.8	757.1	759.2
20°	719.7	724.9	734.2	742.6	745.7
22.5°	702.0	706.2	717.6	728.0	731.1
25°	680.2	686.4	701.0	710.3	714.5
27.5°	657.3	664.6	679.1	691.6	695.8
30°	633.4	640.6	656.2	671.8	677.0
32.5°	608.4	616.7	635.4	651.0	656.2
35°	582.4	589.7	609.4	628.2	634.4
37.5°	555.4	561.6	584.5	604.2	610.5
40°	526.2	534.6	558.5	581.4	587.6
42.5°	497.1	506.5	530.4	555.4	561.6
45°	468.0	478.4	503.4	529.4	536.6
47.5°	439.9	448.2	476.3	501.3	511.7
50°	409.8	418.1	445.1	473.2	483.6
52.5°	378.6	390.0	419.1	446.2	458.6
55°	348.4	359.8	390.0	417.0	428.5
57.5°	320.3	329.7	360.9	389.0	400.4
60°	290.2	298.5	331.8	361.9	372.3
62.5°	257.9	270.4	304.7	332.8	345.3
65°	228.8	242.3	278.7	305.8	318.2
67.5°	201.8	214.2	249.6	278.7	292.2
70°	170.6	187.2	223.6	252.7	265.2
72.5°	145.6	160.2	197.6	226.7	240.2
75°	116.5	134.2	171.6	200.7	211.1
77.5°	92.6	110.2	145.6	168.5	173.7
80°	67.6	85.3	118.6	130.0	133.1
82.5°	45.8	62.4	85.3	88.4	89.4
85°	28.1	38.5	49.9	49.9	49.9
87.5°	13.5	15.6	17.7	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)