

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: P277383

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277383
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-L82765-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: 2119.0 lumens
Efficiency: N/A
Efficacy: 134.8 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

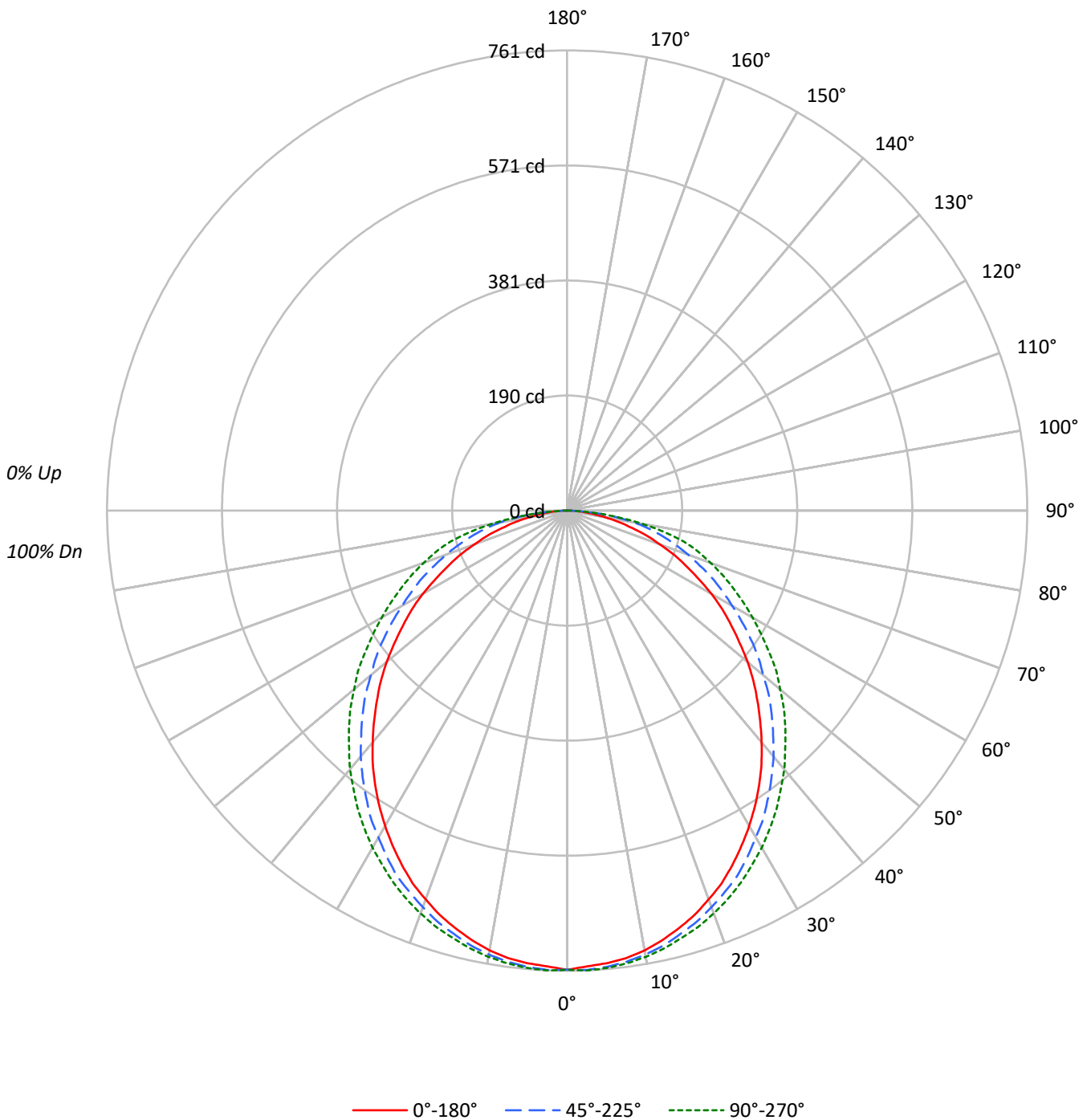
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2043	2043	2043
5°	2030	2046	2051
10°	2018	2037	2048
15°	1991	2019	2038
20°	1959	1999	2030
25°	1920	1979	2017
30°	1871	1939	2000
35°	1819	1903	1981
40°	1757	1865	1962
45°	1693	1821	1942
50°	1631	1772	1924
55°	1554	1740	1911
60°	1484	1697	1905
65°	1385	1687	1926
70°	1275	1673	1983
75°	1151	1696	2087
80°	996	1746	1962
85°	824	1467	1467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	3.4
10°-20°	204.3	9.6
20°-30°	305.8	14.4
30°-40°	362.1	17.1
40°-50°	369.0	17.4
50°-60°	330.7	15.6
60°-70°	259.0	12.2
70°-80°	167.0	7.9
80°-90°	49.3	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°	581.9	27.5
0°-40°	944.0	44.5
0°-60°	1643.8	77.6
0°-90°	2119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2119.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	751	753	757	758	759	71
15°	715	719	725	731	732	202
25°	647	652	666	675	679	298
35°	554	561	579	597	603	346
45°	445	455	478	503	510	344
55°	331	342	371	396	407	297
65°	218	230	265	291	302	216
75°	111	128	163	191	201	119
85°	27	37	48	48	48	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.3	759.3	759.3	759.3	759.3
2.5°	754.4	756.3	760.3	761.3	761.3
5°	751.4	753.4	757.3	758.3	759.3
7.5°	746.5	747.4	752.4	754.4	755.3
10°	738.5	740.5	745.5	748.4	749.4
12.5°	727.7	730.6	736.6	740.5	741.5
15°	714.8	718.8	724.7	730.6	731.6
17.5°	701.0	704.9	712.8	719.8	721.7
20°	684.2	689.1	698.0	705.9	708.9
22.5°	667.4	671.3	682.2	692.1	695.0
25°	646.6	652.5	666.4	675.3	679.2
27.5°	624.8	631.8	645.6	657.5	661.4
30°	602.1	609.0	623.9	638.7	643.6
32.5°	578.4	586.3	604.1	618.9	623.9
35°	553.7	560.6	579.4	597.2	603.1
37.5°	528.0	533.9	555.6	574.4	580.4
40°	500.3	508.2	530.9	552.7	558.6
42.5°	472.6	481.5	504.2	528.0	533.9
45°	444.9	454.8	478.5	503.2	510.2
47.5°	418.2	426.1	452.8	476.5	486.4
50°	389.5	397.4	423.2	449.8	459.7
52.5°	359.9	370.8	398.4	424.1	436.0
55°	331.2	342.1	370.8	396.5	407.3
57.5°	304.5	313.4	343.1	369.8	380.6
60°	275.8	283.8	315.4	344.1	353.9
62.5°	245.2	257.1	289.7	316.4	328.2
65°	217.5	230.4	265.0	290.7	302.5
67.5°	191.8	203.7	237.3	265.0	277.8
70°	162.1	178.0	212.6	240.2	252.1
72.5°	138.4	152.3	187.8	215.5	228.4
75°	110.7	127.5	163.1	190.8	200.7
77.5°	88.0	104.8	138.4	160.2	165.1
80°	64.3	81.1	112.7	123.6	126.6
82.5°	43.5	59.3	81.1	84.0	85.0
85°	26.7	36.6	47.5	47.5	47.5
87.5°	12.9	14.8	16.8	15.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)