

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: P277381

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277381
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-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2004.0 lumens
Efficiency: N/A
Efficacy: 129.8 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

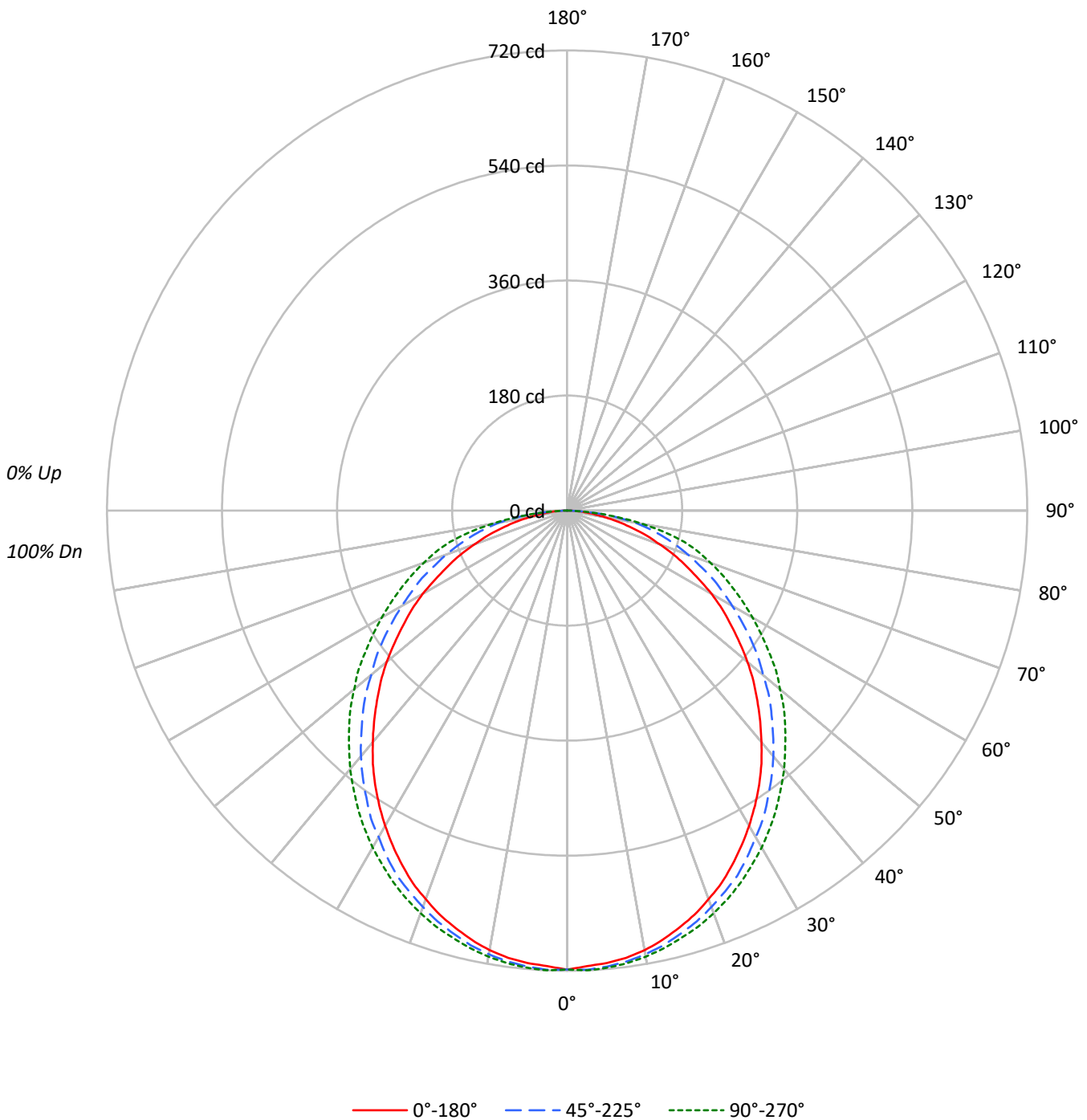
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1932	1932	1932
5°	1920	1935	1940
10°	1909	1926	1937
15°	1883	1909	1928
20°	1853	1890	1920
25°	1816	1871	1907
30°	1769	1833	1891
35°	1720	1800	1874
40°	1662	1764	1856
45°	1601	1722	1836
50°	1542	1675	1820
55°	1469	1645	1807
60°	1404	1605	1801
65°	1310	1596	1822
70°	1206	1581	1876
75°	1089	1604	1973
80°	942	1652	1855
85°	778	1386	1386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	3.4
10°-20°	193.3	9.6
20°-30°	289.2	14.4
30°-40°	342.4	17.1
40°-50°	349.0	17.4
50°-60°	312.8	15.6
60°-70°	244.9	12.2
70°-80°	157.9	7.9
80°-90°	46.7	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°	550.3	27.5
0°-40°	892.8	44.5
0°-60°	1554.5	77.6
0°-90°	2004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	711	712	716	717	718	67
15°	676	680	685	691	692	191
25°	612	617	630	639	642	281
35°	524	530	548	565	570	327
45°	421	430	452	476	482	325
55°	313	324	351	375	385	281
65°	206	218	251	275	286	204
75°	105	121	154	180	190	112
85°	25	35	45	45	45	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.1	718.1	718.1	718.1	718.1
2.5°	713.4	715.3	719.0	720.0	720.0
5°	710.6	712.5	716.2	717.2	718.1
7.5°	705.9	706.9	711.6	713.4	714.4
10°	698.5	700.3	705.0	707.8	708.7
12.5°	688.2	691.0	696.6	700.3	701.3
15°	676.0	679.8	685.4	691.0	691.9
17.5°	662.9	666.7	674.1	680.7	682.6
20°	647.0	651.7	660.1	667.6	670.4
22.5°	631.1	634.9	645.2	654.5	657.3
25°	611.5	617.1	630.2	638.6	642.4
27.5°	590.9	597.5	610.6	621.8	625.5
30°	569.4	576.0	590.0	604.0	608.7
32.5°	547.0	554.5	571.3	585.3	590.0
35°	523.6	530.2	547.9	564.8	570.4
37.5°	499.3	504.9	525.5	543.2	548.9
40°	473.1	480.6	502.1	522.7	528.3
42.5°	446.9	455.4	476.9	499.3	504.9
45°	420.8	430.1	452.5	475.9	482.5
47.5°	395.5	403.0	428.2	450.7	460.0
50°	368.4	375.9	400.2	425.4	434.8
52.5°	340.3	350.6	376.8	401.1	412.3
55°	313.2	323.5	350.6	374.9	385.2
57.5°	288.0	296.4	324.5	349.7	360.0
60°	260.9	268.4	298.3	325.4	334.7
62.5°	231.9	243.1	274.0	299.2	310.4
65°	205.7	217.9	250.6	274.9	286.1
67.5°	181.4	192.6	224.4	250.6	262.7
70°	153.3	168.3	201.0	227.2	238.4
72.5°	130.9	144.0	177.7	203.8	216.0
75°	104.7	120.6	154.3	180.5	189.8
77.5°	83.2	99.1	130.9	151.5	156.1
80°	60.8	76.7	106.6	116.9	119.7
82.5°	41.1	56.1	76.7	79.5	80.4
85°	25.2	34.6	44.9	44.9	44.9
87.5°	12.2	14.0	15.9	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)