

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: P277605

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277605  
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-L92765-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: 1190.0 lumens  
Efficiency: N/A  
Efficacy: 75.7 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

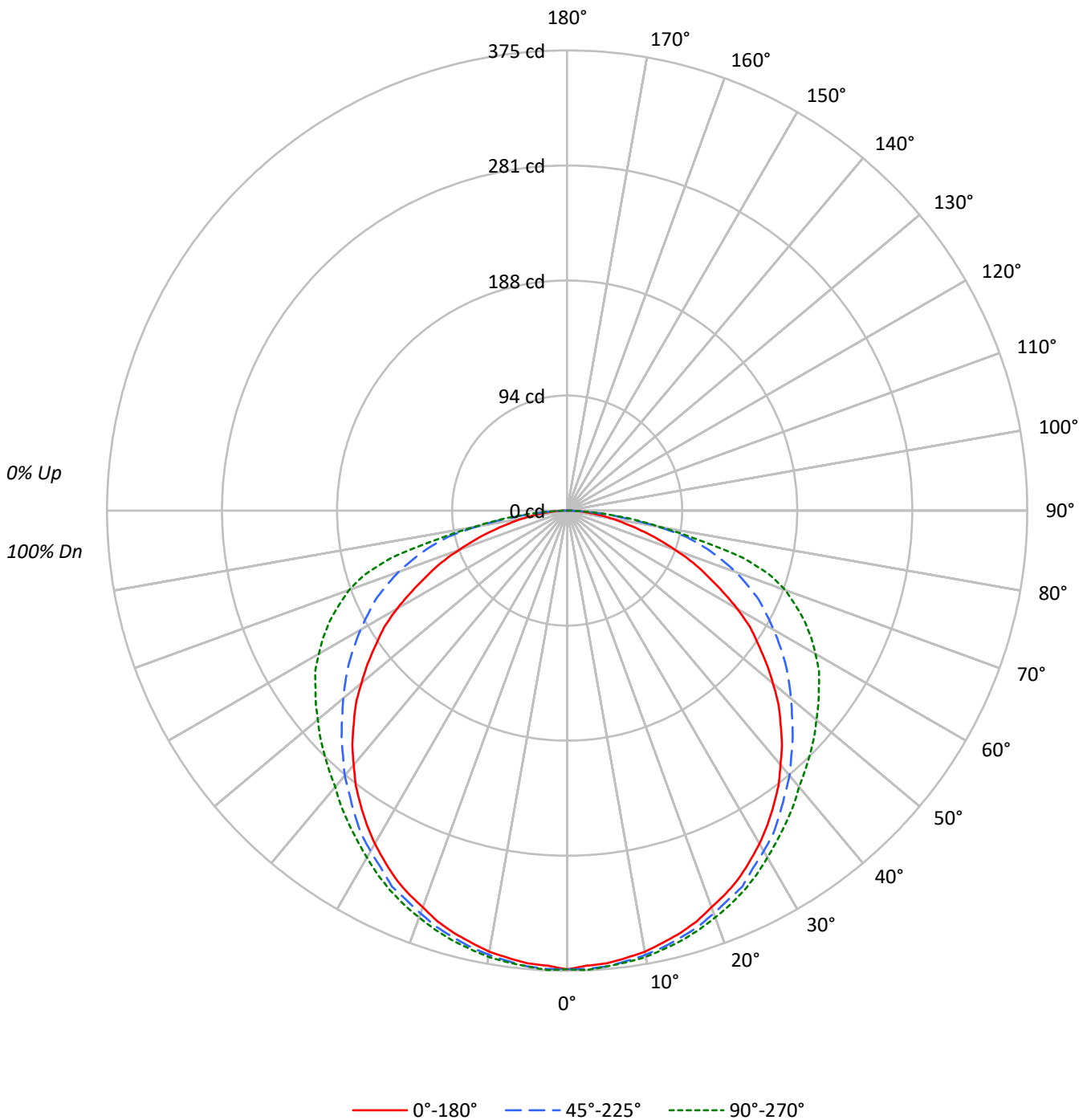
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1006	1006	1006
5°	1000	1007	1007
10°	997	1005	1009
15°	993	1002	1010
20°	985	1000	1010
25°	982	1003	1014
30°	974	996	1015
35°	964	992	1021
40°	950	990	1033
45°	936	989	1066
50°	916	997	1110
55°	891	1019	1175
60°	862	1046	1258
65°	803	1098	1360
70°	737	1150	1488
75°	647	1210	1538
80°	556	1153	1207
85°	488	837	920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.4	3.0
10°-20°	101.5	8.5
20°-30°	154.9	13.0
30°-40°	189.1	15.9
40°-50°	202.2	17.0
50°-60°	195.2	16.4
60°-70°	168.0	14.1
70°-80°	113.7	9.6
80°-90°	30.0	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°	291.8	24.5
0°-40°	480.9	40.4
0°-60°	878.3	73.8
0°-90°	1190.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1190.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	370	371	373	373	373	35
15°	356	357	360	362	362	101
25°	331	333	338	340	341	152
35°	293	296	302	308	311	184
45°	246	250	260	273	280	190
55°	190	196	217	239	250	170
65°	126	138	172	200	214	125
75°	62	82	116	140	148	67
85°	16	22	27	28	30	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	373.8	373.8	373.8	373.8	373.8
2.5°	371.2	372.0	373.8	373.8	374.7
5°	370.3	371.2	372.9	372.9	372.9
7.5°	367.7	368.5	370.3	371.2	371.2
10°	365.0	365.9	367.7	368.5	369.4
12.5°	360.7	361.5	364.2	365.9	365.9
15°	356.3	357.2	359.8	361.5	362.4
17.5°	351.0	352.8	355.4	357.2	358.0
20°	344.0	345.8	349.3	351.9	352.8
22.5°	337.9	339.7	343.2	345.8	347.5
25°	330.9	332.7	337.9	339.7	341.4
27.5°	322.2	323.9	328.3	331.8	334.4
30°	313.4	315.1	320.4	324.8	326.5
32.5°	303.8	306.4	312.5	316.0	318.6
35°	293.3	295.9	302.0	308.1	310.8
37.5°	282.8	285.4	291.5	299.4	302.9
40°	270.5	274.0	281.9	292.4	294.1
42.5°	259.1	263.5	270.5	282.8	287.1
45°	246.0	250.4	260.0	273.1	280.1
47.5°	233.7	238.1	248.6	264.4	273.1
50°	218.9	225.0	238.1	256.5	265.2
52.5°	204.8	210.1	227.6	247.7	258.2
55°	190.0	196.1	217.1	239.0	250.4
57.5°	176.8	182.1	205.7	230.2	243.4
60°	160.2	167.2	194.3	220.6	233.7
62.5°	142.7	153.2	183.0	210.1	224.1
65°	126.1	138.3	172.5	199.6	213.6
67.5°	111.2	124.3	159.3	188.2	201.3
70°	93.7	110.3	146.2	174.2	189.1
72.5°	77.9	96.3	131.3	159.3	172.5
75°	62.2	82.3	116.4	140.1	147.9
77.5°	48.1	67.4	99.8	106.8	107.7
80°	35.9	53.4	74.4	75.3	77.9
82.5°	24.5	37.6	48.1	52.5	53.4
85°	15.8	21.9	27.1	28.0	29.8
87.5°	7.0	7.9	9.6	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)