

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: P277518

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277518  
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-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1048.0 lumens  
Efficiency: N/A  
Efficacy: 66.0 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

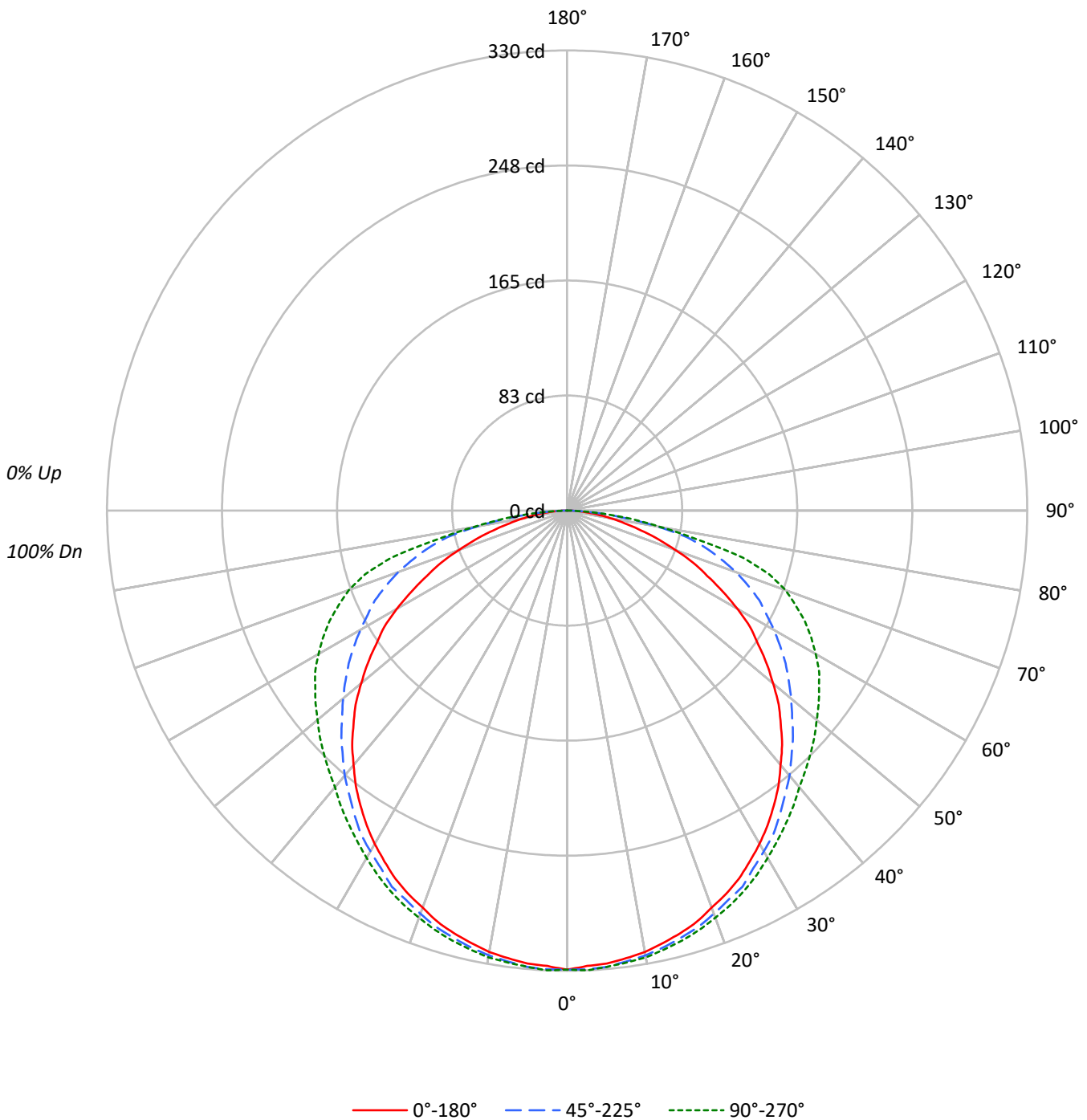
Input Watts (W): 15.888213  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	886	886	886
5°	881	887	887
10°	878	885	889
15°	874	883	889
20°	868	881	890
25°	865	884	893
30°	858	877	894
35°	849	874	899
40°	837	872	910
45°	824	871	939
50°	807	878	978
55°	785	897	1034
60°	759	921	1108
65°	707	967	1198
70°	649	1013	1310
75°	569	1066	1355
80°	490	1015	1063
85°	429	738	809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.1	3.0
10°-20°	89.4	8.5
20°-30°	136.4	13.0
30°-40°	166.6	15.9
40°-50°	178.1	17.0
50°-60°	171.9	16.4
60°-70°	148.0	14.1
70°-80°	100.1	9.6
80°-90°	26.4	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°	257.0	24.5
0°-40°	423.5	40.4
0°-60°	773.5	73.8
0°-90°	1048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1048.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	329	329	329	329	329	
5°	326	327	328	328	328	31
15°	314	314	317	318	319	89
25°	291	293	298	299	301	134
35°	258	261	266	271	274	162
45°	217	220	229	240	247	167
55°	167	173	191	210	220	150
65°	111	122	152	176	188	110
75°	55	72	102	123	130	59
85°	14	19	24	25	26	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	329.2	329.2	329.2	329.2	329.2
2.5°	326.9	327.7	329.2	329.2	330.0
5°	326.1	326.9	328.4	328.4	328.4
7.5°	323.8	324.6	326.1	326.9	326.9
10°	321.5	322.3	323.8	324.6	325.3
12.5°	317.6	318.4	320.7	322.3	322.3
15°	313.8	314.5	316.9	318.4	319.2
17.5°	309.2	310.7	313.0	314.5	315.3
20°	303.0	304.5	307.6	309.9	310.7
22.5°	297.6	299.1	302.2	304.5	306.1
25°	291.4	293.0	297.6	299.1	300.7
27.5°	283.7	285.3	289.1	292.2	294.5
30°	276.0	277.5	282.2	286.0	287.6
32.5°	267.5	269.8	275.2	278.3	280.6
35°	258.3	260.6	266.0	271.4	273.7
37.5°	249.0	251.3	256.7	263.7	266.7
40°	238.2	241.3	248.2	257.5	259.0
42.5°	228.2	232.1	238.2	249.0	252.9
45°	216.6	220.5	229.0	240.5	246.7
47.5°	205.8	209.7	218.9	232.8	240.5
50°	192.7	198.1	209.7	225.9	233.6
52.5°	180.4	185.0	200.4	218.2	227.4
55°	167.3	172.7	191.2	210.5	220.5
57.5°	155.7	160.4	181.2	202.8	214.3
60°	141.1	147.3	171.2	194.3	205.8
62.5°	125.7	134.9	161.1	185.0	197.4
65°	111.0	121.8	151.9	175.8	188.1
67.5°	97.9	109.5	140.3	165.8	177.3
70°	82.5	97.1	128.7	153.4	166.5
72.5°	68.6	84.8	115.6	140.3	151.9
75°	54.7	72.5	102.5	123.4	130.3
77.5°	42.4	59.4	87.9	94.1	94.8
80°	31.6	47.0	65.5	66.3	68.6
82.5°	21.6	33.2	42.4	46.3	47.0
85°	13.9	19.3	23.9	24.7	26.2
87.5°	6.2	6.9	8.5	7.7	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)