

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: P277024

Luminaire Tested: **24CZ2-30HE-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-RDP-UNV-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1841.3 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

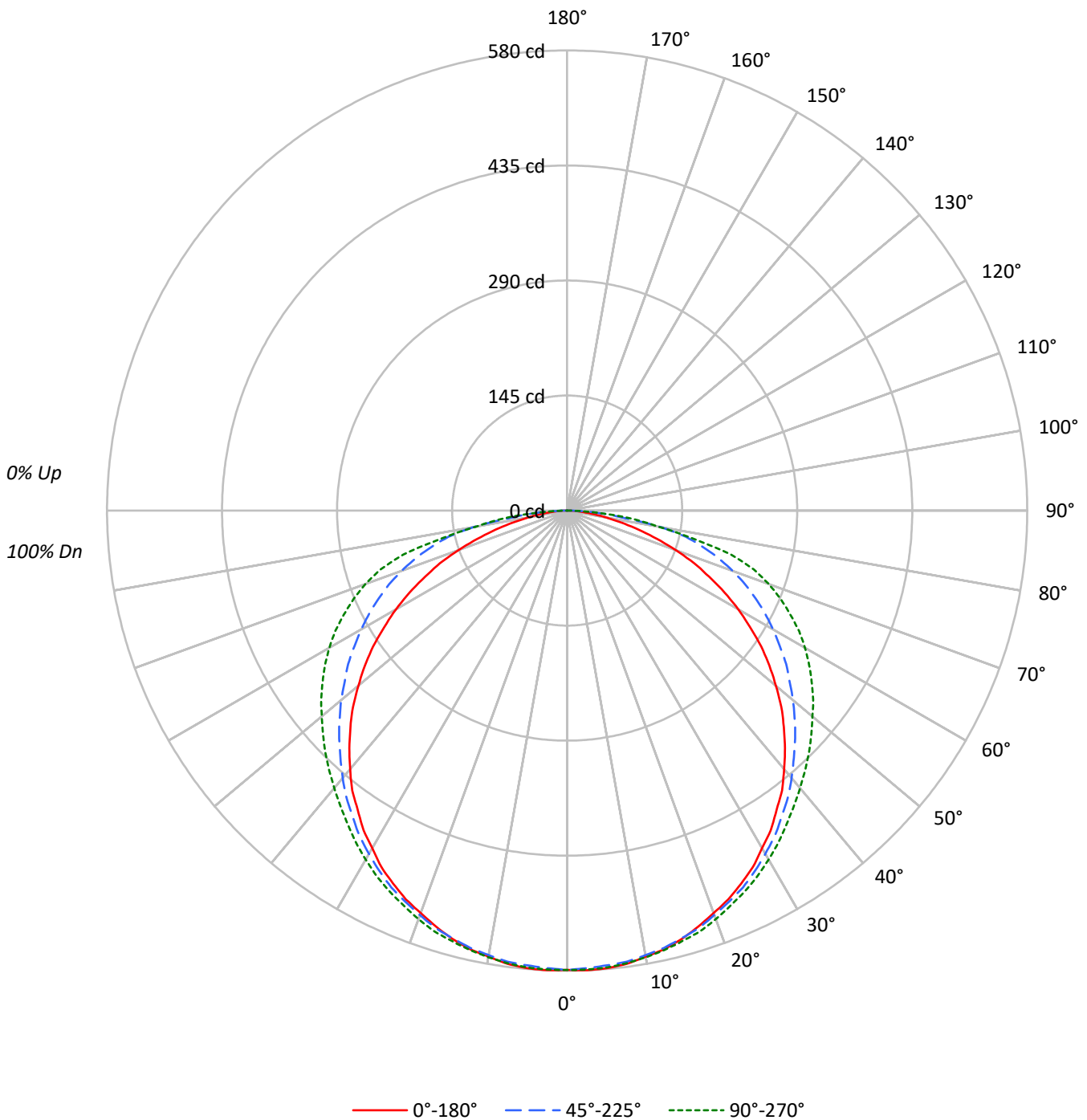
Input Watts (W): 20.181  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89		92	89	87		88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	62	86	76	68	61	72	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		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°	779	779	779
5°	782	777	781
10°	780	777	781
15°	779	777	782
20°	773	777	785
25°	770	778	786
30°	763	776	789
35°	756	774	792
40°	748	773	802
45°	735	773	820
50°	719	778	845
55°	700	791	883
60°	671	806	931
65°	628	834	989
70°	571	873	1063
75°	485	921	1111
80°	382	927	899
85°	283	706	789



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.9	3.0
10°-20°	158.1	8.6
20°-30°	241.7	13.1
30°-40°	295.5	16.1
40°-50°	315.0	17.1
50°-60°	301.1	16.4
60°-70°	255.1	13.9
70°-80°	171.4	9.3
80°-90°	48.4	2.6
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°	454.7	24.7
0°-40°	750.3	40.7
0°-60°	1366.4	74.2
0°-90°	1841.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1841.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	579	578	575	578	578	55
15°	559	559	558	563	562	158
25°	519	521	524	529	530	239
35°	460	464	471	480	482	288
45°	386	393	406	424	431	298
55°	299	310	337	364	376	266
65°	197	217	262	297	310	196
75°	93	127	177	207	214	100
85°	18	37	46	49	51	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	579.0	579.0	579.0	579.0	579.0
2.5°	579.9	579.9	577.2	579.0	579.0
5°	579.0	578.1	575.4	578.1	578.1
7.5°	576.3	575.4	573.6	576.3	575.4
10°	570.8	570.8	569.0	571.7	571.7
12.5°	566.2	565.3	564.4	568.1	567.2
15°	558.9	558.9	558.0	562.6	561.7
17.5°	549.8	550.7	551.6	555.3	556.2
20°	539.8	541.6	542.5	548.0	548.0
22.5°	530.6	531.5	533.4	538.8	538.8
25°	518.8	520.6	524.2	528.8	529.7
27.5°	506.9	507.8	512.4	518.8	519.7
30°	491.4	494.1	499.6	506.9	507.8
32.5°	477.7	480.4	486.8	494.1	495.9
35°	460.3	464.0	471.3	480.4	482.2
37.5°	444.8	447.5	456.7	466.7	469.4
40°	425.6	431.1	440.2	452.1	456.7
42.5°	406.4	411.9	422.9	438.4	443.9
45°	386.3	392.7	406.4	423.8	431.1
47.5°	366.2	373.5	389.1	409.2	417.4
50°	343.4	352.5	371.7	394.5	403.7
52.5°	321.5	332.4	353.4	379.0	390.9
55°	298.6	309.6	337.0	363.5	376.3
57.5°	273.1	287.7	317.8	348.0	361.7
60°	249.3	263.0	299.6	332.4	346.1
62.5°	223.8	242.0	281.3	316.0	329.7
65°	197.3	217.4	262.1	296.8	310.5
67.5°	173.5	195.4	242.9	277.6	291.3
70°	145.2	172.6	221.9	256.6	270.3
72.5°	118.7	148.9	200.0	233.8	246.6
75°	93.2	126.9	177.2	207.3	213.7
77.5°	69.4	105.0	153.4	166.2	161.7
80°	49.3	84.0	119.6	113.2	116.0
82.5°	32.0	63.9	74.0	84.0	86.8
85°	18.3	37.4	45.7	49.3	51.1
87.5°	8.2	13.7	18.3	18.3	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)