

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: P276178

Luminaire Tested: **24CZ2-30HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2366.9 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

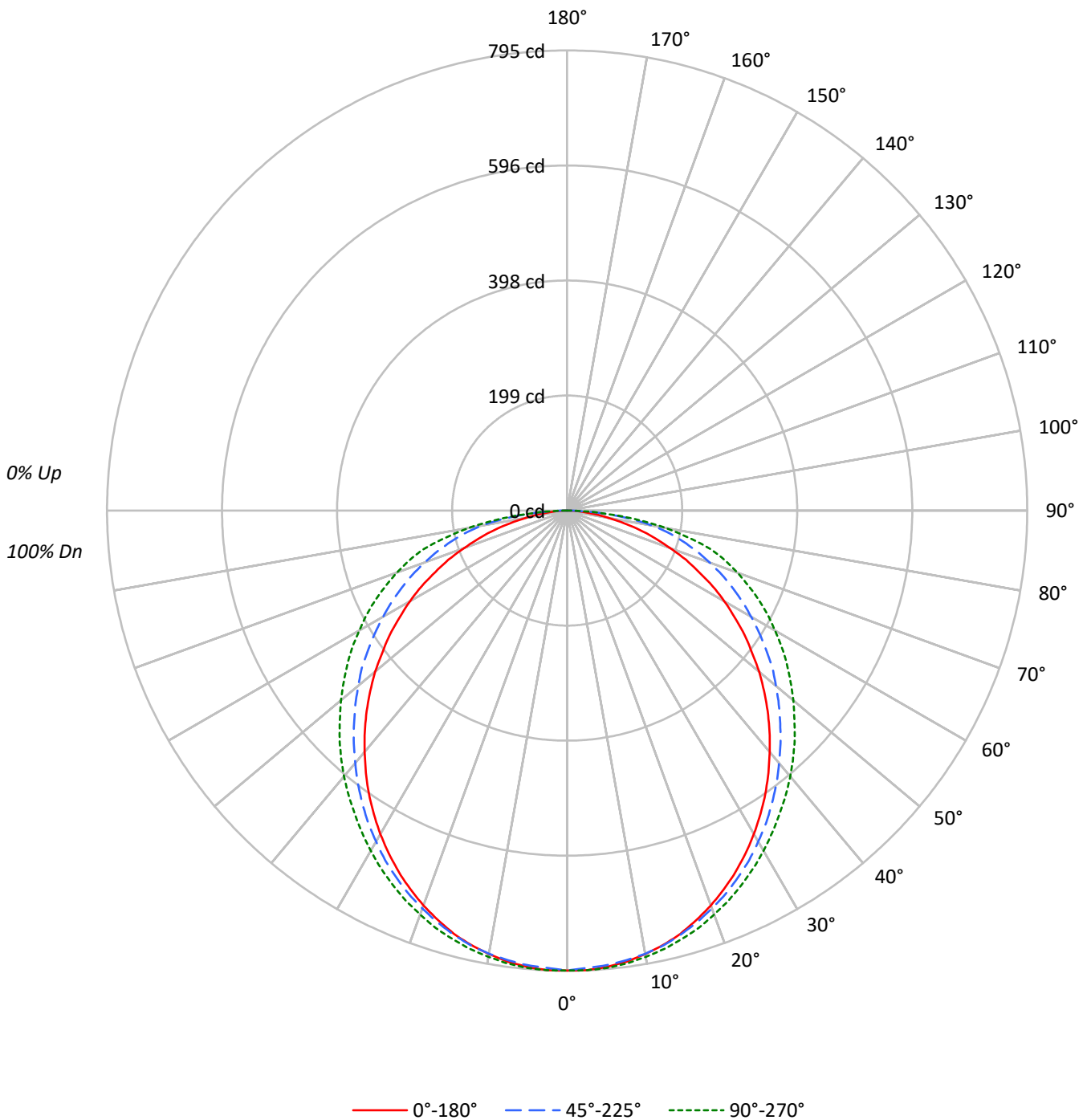
Input Watts (W): 19.437  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	89	86	84	82																												
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																												
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56																												
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48																												
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																												
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36																												
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32																												
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28																												
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25																												
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1069	1069	1069
5°	1069	1065	1071
10°	1063	1062	1069
15°	1054	1056	1067
20°	1040	1047	1063
25°	1023	1038	1059
30°	1003	1026	1054
35°	981	1013	1051
40°	956	1000	1053
45°	932	991	1058
50°	906	985	1068
55°	878	984	1088
60°	844	988	1116
65°	800	1004	1164
70°	743	1029	1231
75°	677	1080	1334
80°	557	1163	1334
85°	426	1073	1147



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.2	3.2
10°-20°	214.6	9.1
20°-30°	322.9	13.6
30°-40°	386.9	16.3
40°-50°	403.2	17.0
50°-60°	375.2	15.9
60°-70°	309.0	13.1
70°-80°	210.4	8.9
80°-90°	69.5	2.9
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°	612.6	25.9
0°-40°	999.6	42.2
0°-60°	1778.0	75.1
0°-90°	2366.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2366.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	792	792	788	792	793	75
15°	757	758	758	765	766	213
25°	689	692	699	711	713	317
35°	597	604	617	634	640	373
45°	490	500	521	547	556	378
55°	374	387	420	453	464	334
65°	251	272	315	352	366	249
75°	130	160	208	245	257	137
85°	28	54	70	74	74	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	794.7	794.7	794.7	794.7	794.7
2.5°	794.7	794.7	790.7	794.7	794.7
5°	791.5	791.5	788.4	792.3	793.1
7.5°	786.0	786.8	783.6	788.4	789.1
10°	778.1	778.9	777.3	782.0	782.8
12.5°	768.6	769.4	769.4	774.9	775.7
15°	756.8	757.5	758.3	765.4	766.2
17.5°	741.8	744.1	745.7	754.4	756.0
20°	726.0	728.3	731.5	741.0	742.5
22.5°	707.8	710.9	716.5	726.7	729.1
25°	688.8	692.0	699.1	710.9	713.3
27.5°	667.5	672.2	680.9	693.6	696.7
30°	645.4	650.1	660.4	673.8	678.6
32.5°	621.7	628.0	639.8	654.9	659.6
35°	597.2	604.3	616.9	633.5	639.8
37.5°	571.1	579.0	594.0	612.2	620.1
40°	544.3	553.7	569.5	590.9	599.6
42.5°	517.4	526.1	545.8	568.8	578.2
45°	489.8	500.0	520.6	546.6	556.1
47.5°	461.3	471.6	496.1	523.7	532.4
50°	432.9	443.2	470.8	500.0	510.3
52.5°	402.1	415.5	447.1	476.3	486.6
55°	374.4	387.1	419.5	452.6	463.7
57.5°	342.8	357.8	393.4	428.1	440.0
60°	313.6	329.4	367.3	402.9	414.7
62.5°	283.6	301.0	341.3	377.6	391.0
65°	251.2	272.5	315.2	352.3	365.7
67.5°	222.0	244.1	289.1	327.0	338.9
70°	188.8	215.7	261.5	299.4	312.8
72.5°	160.4	187.2	235.4	272.5	286.0
75°	130.3	159.6	207.8	244.9	256.7
77.5°	100.3	132.7	180.9	209.3	213.3
80°	71.9	105.9	150.1	166.7	172.2
82.5°	50.6	81.4	110.6	121.7	124.8
85°	27.6	53.7	69.5	74.3	74.3
87.5°	11.8	22.9	27.6	28.4	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)