

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: P277022

Luminaire Tested: **24CZ2-30HE-RDP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277022  
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-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1805.7 lumens  
Efficiency: N/A  
Efficacy: 89.9 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

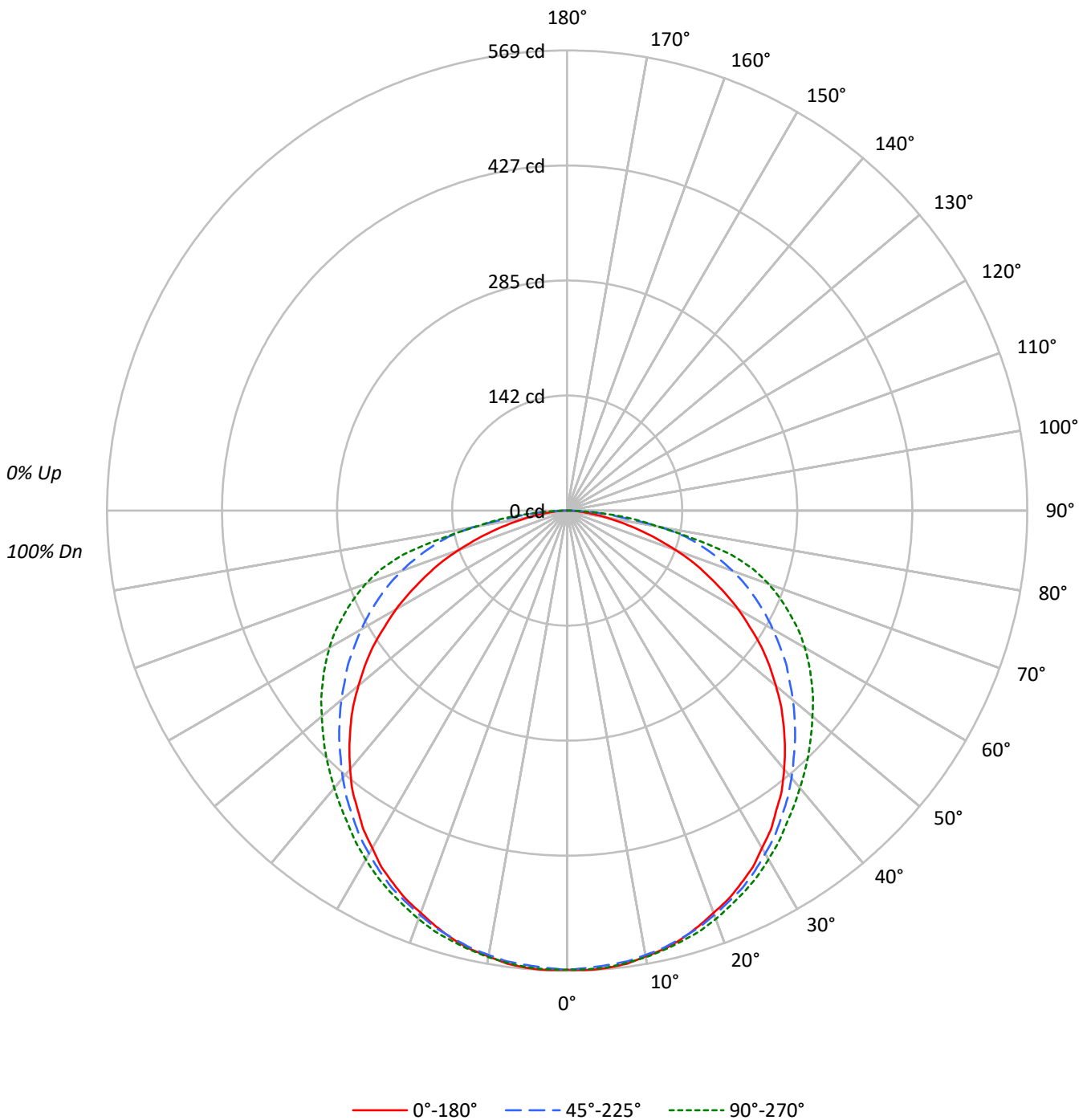
Input Watts (W): 20.088  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	67	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°	764	764	764
5°	767	762	766
10°	765	762	766
15°	763	762	767
20°	758	762	769
25°	755	763	771
30°	749	761	774
35°	741	759	777
40°	733	758	787
45°	721	758	804
50°	705	763	829
55°	687	775	866
60°	658	791	913
65°	616	818	969
70°	560	856	1043
75°	475	904	1090
80°	375	909	881
85°	276	692	775



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	3.0
10°-20°	155.0	8.6
20°-30°	237.1	13.1
30°-40°	289.8	16.0
40°-50°	308.9	17.1
50°-60°	295.3	16.4
60°-70°	250.2	13.9
70°-80°	168.1	9.3
80°-90°	47.4	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°	445.9	24.7
0°-40°	735.7	40.7
0°-60°	1339.9	74.2
0°-90°	1805.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1805.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	568	567	564	567	567	54
15°	548	548	547	552	551	155
25°	509	510	514	519	520	234
35°	451	455	462	471	473	283
45°	379	385	399	416	423	292
55°	293	304	330	356	369	261
65°	194	213	257	291	304	192
75°	91	124	174	203	210	98
85°	18	37	45	48	50	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	567.8	567.8	567.8	567.8	567.8
2.5°	568.7	568.7	566.0	567.8	567.8
5°	567.8	566.9	564.2	566.9	566.9
7.5°	565.1	564.2	562.5	565.1	564.2
10°	559.8	559.8	558.0	560.7	560.7
12.5°	555.3	554.4	553.5	557.1	556.2
15°	548.1	548.1	547.2	551.7	550.8
17.5°	539.2	540.1	541.0	544.5	545.4
20°	529.3	531.1	532.0	537.4	537.4
22.5°	520.4	521.3	523.0	528.4	528.4
25°	508.7	510.5	514.1	518.6	519.5
27.5°	497.1	498.0	502.4	508.7	509.6
30°	481.8	484.5	489.9	497.1	498.0
32.5°	468.4	471.1	477.4	484.5	486.3
35°	451.4	455.0	462.1	471.1	472.9
37.5°	436.2	438.9	447.8	457.7	460.4
40°	417.4	422.7	431.7	443.3	447.8
42.5°	398.6	403.9	414.7	429.9	435.3
45°	378.9	385.1	398.6	415.6	422.7
47.5°	359.1	366.3	381.5	401.2	409.3
50°	336.8	345.7	364.5	386.9	395.9
52.5°	315.3	326.0	346.6	371.7	383.3
55°	292.9	303.6	330.5	356.5	369.0
57.5°	267.8	282.1	311.7	341.2	354.7
60°	244.5	257.9	293.8	326.0	339.4
62.5°	219.4	237.3	275.9	309.9	323.3
65°	193.5	213.2	257.0	291.1	304.5
67.5°	170.2	191.7	238.2	272.3	285.7
70°	142.4	169.3	217.6	251.7	265.1
72.5°	116.4	146.0	196.1	229.3	241.8
75°	91.4	124.5	173.8	203.3	209.6
77.5°	68.1	103.0	150.5	163.0	158.5
80°	48.4	82.4	117.3	111.1	113.7
82.5°	31.3	62.7	72.5	82.4	85.1
85°	17.9	36.7	44.8	48.4	50.2
87.5°	8.1	13.4	17.9	17.9	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)