

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: P276815

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276815  
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: 24CZ2-35HE-RDP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2091.2 lumens  
Efficiency: N/A  
Efficacy: 83.0 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

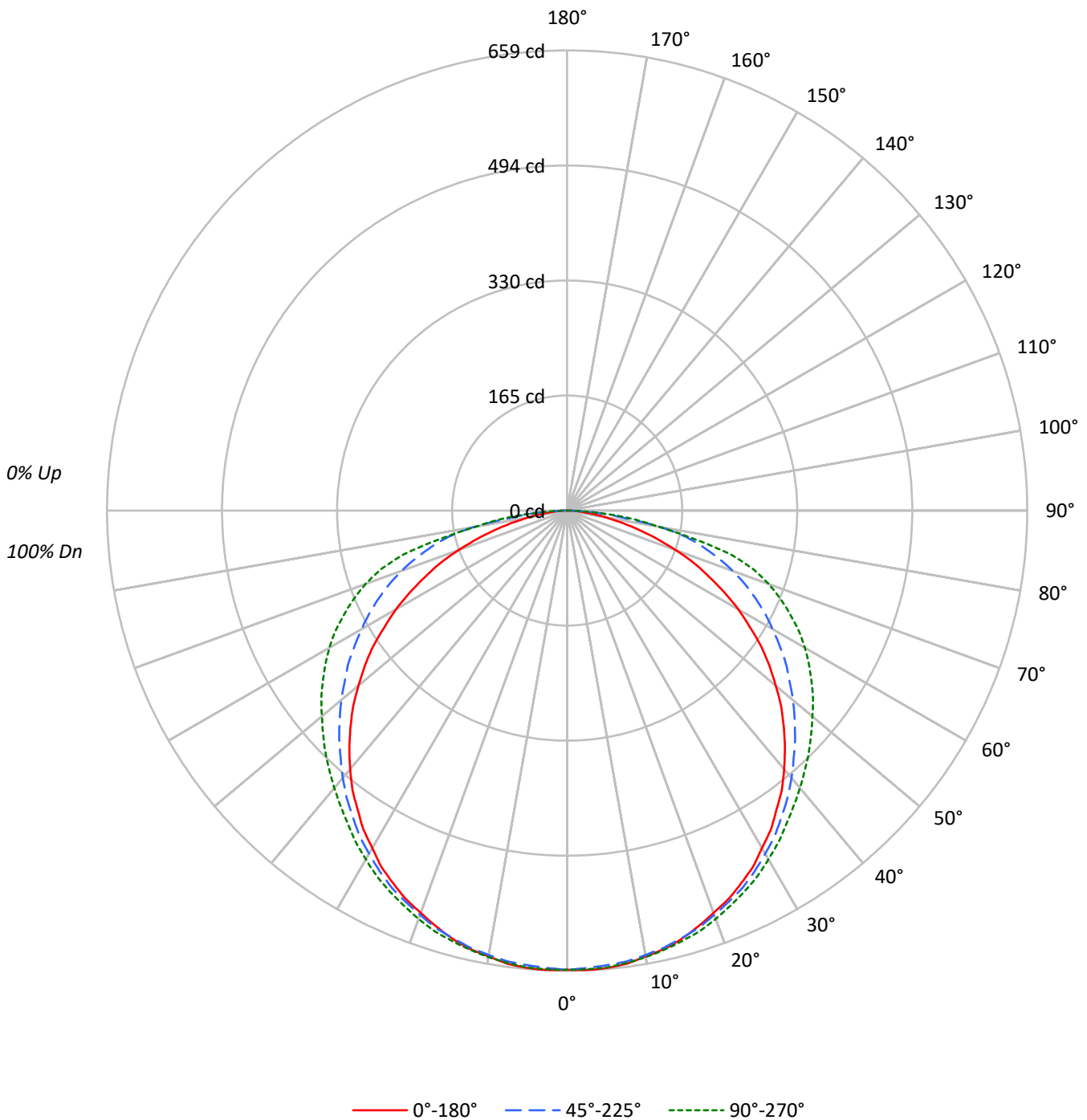
Input Watts (W): 25.19556  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	885	885	885
5°	888	883	887
10°	886	883	887
15°	884	883	889
20°	878	882	891
25°	875	884	893
30°	867	882	896
35°	859	879	900
40°	849	878	911
45°	835	878	932
50°	816	884	960
55°	796	898	1002
60°	762	915	1058
65°	713	948	1123
70°	649	992	1208
75°	550	1046	1262
80°	434	1053	1020
85°	320	801	897



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	3.0
10°-20°	179.5	8.6
20°-30°	274.5	13.1
30°-40°	335.6	16.0
40°-50°	357.7	17.1
50°-60°	342.0	16.4
60°-70°	289.7	13.9
70°-80°	194.7	9.3
80°-90°	54.9	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°	516.5	24.7
0°-40°	852.1	40.7
0°-60°	1551.8	74.2
0°-90°	2091.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	658	657	654	657	657	62
15°	635	635	634	639	638	179
25°	589	591	595	601	602	272
35°	523	527	535	546	548	327
45°	439	446	462	481	490	338
55°	339	352	383	413	427	302
65°	224	247	298	337	353	222
75°	106	144	201	236	243	113
85°	21	42	52	56	58	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	657.6	657.6	657.6	657.6	657.6
2.5°	658.7	658.7	655.5	657.6	657.6
5°	657.6	656.6	653.5	656.6	656.6
7.5°	654.5	653.5	651.4	654.5	653.5
10°	648.3	648.3	646.2	649.3	649.3
12.5°	643.1	642.1	641.0	645.2	644.1
15°	634.8	634.8	633.8	638.9	637.9
17.5°	624.4	625.5	626.5	630.6	631.7
20°	613.0	615.1	616.1	622.3	622.3
22.5°	602.6	603.7	605.8	612.0	612.0
25°	589.2	591.2	595.4	600.6	601.6
27.5°	575.7	576.7	581.9	589.2	590.2
30°	558.0	561.2	567.4	575.7	576.7
32.5°	542.5	545.6	552.9	561.2	563.2
35°	522.8	526.9	535.2	545.6	547.7
37.5°	505.1	508.3	518.6	530.0	533.1
40°	483.4	489.6	500.0	513.4	518.6
42.5°	461.6	467.8	480.2	497.9	504.1
45°	438.8	446.0	461.6	481.3	489.6
47.5°	415.9	424.2	441.9	464.7	474.0
50°	390.0	400.4	422.2	448.1	458.5
52.5°	365.1	377.6	401.4	430.5	443.9
55°	339.2	351.6	382.7	412.8	427.3
57.5°	310.1	326.7	361.0	395.2	410.7
60°	283.2	298.7	340.2	377.6	393.1
62.5°	254.1	274.9	319.5	358.9	374.4
65°	224.0	246.9	297.7	337.1	352.7
67.5°	197.1	222.0	275.9	315.3	330.9
70°	164.9	196.0	252.1	291.5	307.0
72.5°	134.8	169.1	227.2	265.5	280.1
75°	105.8	144.2	201.2	235.5	242.7
77.5°	78.8	119.3	174.3	188.8	183.6
80°	56.0	95.4	135.9	128.6	131.7
82.5°	36.3	72.6	84.0	95.4	98.5
85°	20.7	42.5	51.9	56.0	58.1
87.5°	9.3	15.6	20.7	20.7	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)