

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: P296148

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296148
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-5000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2647.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

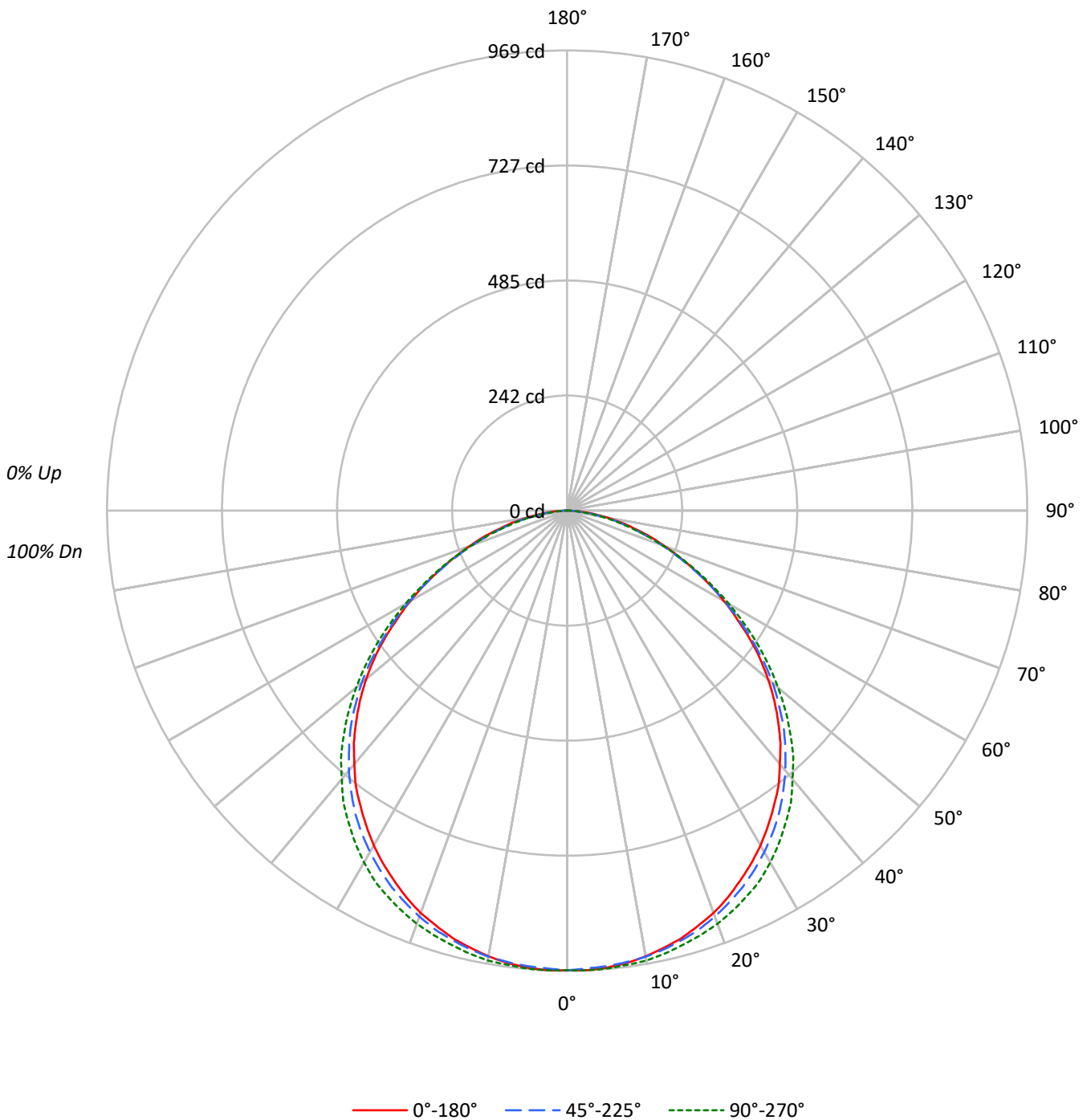
Input Watts (W): 21.669
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1302	1302	1302
5°	1305	1301	1307
10°	1302	1303	1314
15°	1298	1304	1318
20°	1291	1303	1326
25°	1278	1298	1330
30°	1265	1290	1329
35°	1247	1278	1318
40°	1224	1256	1296
45°	1196	1227	1265
50°	1156	1183	1215
55°	1100	1114	1147
60°	1027	1032	1059
65°	943	937	959
70°	857	834	838
75°	762	721	715
80°	662	591	576
85°	542	418	326



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	3.5
10°-20°	264.7	10.0
20°-30°	404.0	15.3
30°-40°	487.0	18.4
40°-50°	496.7	18.8
50°-60°	425.0	16.1
60°-70°	292.8	11.1
70°-80°	150.1	5.7
80°-90°	34.9	1.3
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°	760.4	28.7
0°-40°	1247.5	47.1
0°-60°	2169.2	81.9
0°-90°	2647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	966	964	963	966	968	92
15°	932	931	936	943	946	263
25°	861	864	875	890	896	397
35°	759	762	778	795	802	475
45°	629	630	645	661	665	484
55°	469	466	475	485	489	418
65°	296	289	294	296	301	294
75°	147	141	139	139	138	158
85°	35	31	27	24	21	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	968.0	968.0	968.0	968.0	968.0
2.5°	969.0	967.0	965.0	967.0	969.0
5°	966.0	964.0	963.0	966.0	968.0
7.5°	961.0	959.0	959.0	963.0	965.0
10°	953.0	952.0	954.0	958.0	962.0
12.5°	942.9	942.9	945.9	950.9	955.0
15°	931.9	930.9	935.9	942.9	945.9
17.5°	916.8	917.8	924.8	932.9	936.9
20°	901.7	902.7	909.8	920.8	925.8
22.5°	882.7	884.7	892.7	906.8	911.8
25°	860.6	863.6	874.6	889.7	895.7
27.5°	838.5	841.5	853.5	870.6	878.6
30°	814.4	818.4	830.4	848.5	855.6
32.5°	787.3	790.3	805.3	823.4	830.4
35°	759.2	762.2	778.2	795.3	802.3
37.5°	731.0	731.0	747.1	767.2	774.2
40°	696.9	697.9	715.0	734.0	738.1
42.5°	664.8	664.8	679.8	697.9	704.9
45°	628.6	629.6	644.7	660.7	664.8
47.5°	591.5	591.5	604.5	619.6	623.6
50°	552.3	550.3	565.3	577.4	580.4
52.5°	512.1	509.1	521.2	531.2	535.2
55°	468.9	465.9	475.0	485.0	489.0
57.5°	423.8	419.7	429.8	438.8	440.8
60°	381.6	375.6	383.6	388.6	393.6
62.5°	339.4	332.4	338.4	341.4	345.4
65°	296.2	289.2	294.2	296.2	301.3
67.5°	255.1	250.0	251.0	254.1	256.1
70°	217.9	211.9	211.9	211.9	212.9
72.5°	183.8	174.7	173.7	174.7	174.7
75°	146.6	140.6	138.6	138.6	137.6
77.5°	117.5	109.5	108.5	106.4	104.4
80°	85.4	78.3	76.3	75.3	74.3
82.5°	59.2	53.2	51.2	49.2	46.2
85°	35.1	31.1	27.1	24.1	21.1
87.5°	13.1	12.1	10.0	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)