

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: P296097

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296097
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-L83050-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: 2725.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

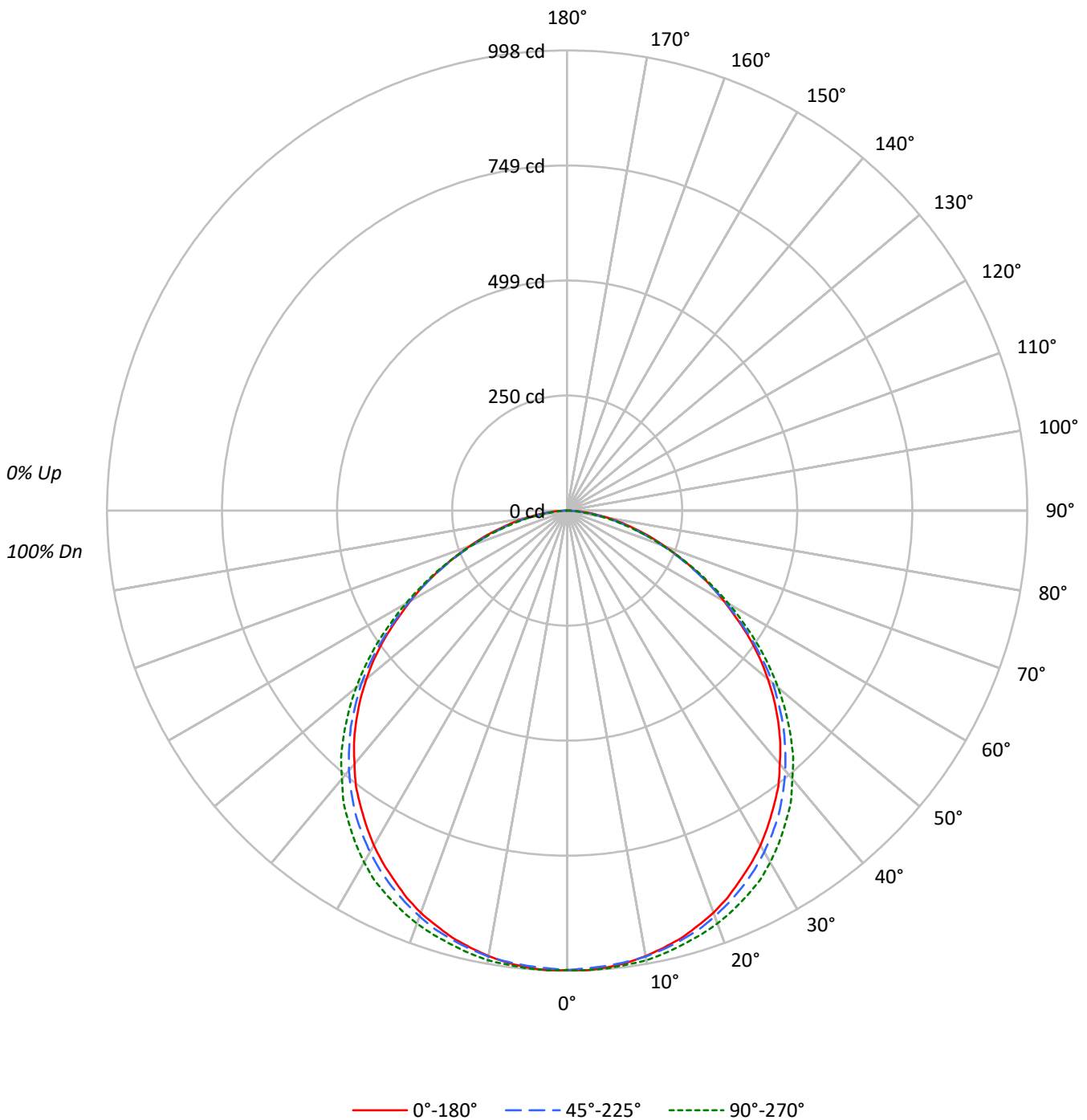
Input Watts (W): 22.227
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1341	1341	1341
5°	1343	1339	1346
10°	1340	1342	1353
15°	1336	1342	1356
20°	1329	1341	1365
25°	1315	1337	1369
30°	1303	1328	1368
35°	1284	1316	1357
40°	1260	1293	1335
45°	1231	1263	1302
50°	1190	1218	1251
55°	1133	1147	1181
60°	1057	1063	1090
65°	971	964	987
70°	882	858	862
75°	784	742	736
80°	681	609	593
85°	559	431	335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.5
10°-20°	272.5	10.0
20°-30°	415.9	15.3
30°-40°	501.4	18.4
40°-50°	511.3	18.8
50°-60°	437.6	16.1
60°-70°	301.4	11.1
70°-80°	154.5	5.7
80°-90°	36.0	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°	782.9	28.7
0°-40°	1284.2	47.1
0°-60°	2233.1	81.9
0°-90°	2725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2725.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	994	992	991	994	996	95
15°	959	958	964	971	974	271
25°	886	889	900	916	922	409
35°	782	785	801	819	826	489
45°	647	648	664	680	684	499
55°	483	480	489	499	503	431
65°	305	298	303	305	310	303
75°	151	145	143	143	142	163
85°	36	32	28	25	22	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.5	996.5	996.5	996.5	996.5
2.5°	997.6	995.5	993.4	995.5	997.6
5°	994.5	992.4	991.4	994.5	996.5
7.5°	989.3	987.2	987.2	991.4	993.4
10°	981.0	980.0	982.1	986.2	990.3
12.5°	970.7	970.7	973.8	979.0	983.1
15°	959.3	958.3	963.5	970.7	973.8
17.5°	943.8	944.9	952.1	960.4	964.5
20°	928.3	929.3	936.6	948.0	953.1
22.5°	908.7	910.7	919.0	933.5	938.7
25°	885.9	889.0	900.4	915.9	922.1
27.5°	863.2	866.3	878.7	896.3	904.5
30°	838.4	842.5	854.9	873.5	880.8
32.5°	810.5	813.6	829.1	847.7	854.9
35°	781.5	784.6	801.2	818.7	826.0
37.5°	752.6	752.6	769.1	789.8	797.0
40°	717.4	718.5	736.0	755.7	759.8
42.5°	684.3	684.3	699.9	718.5	725.7
45°	647.1	648.2	663.7	680.2	684.3
47.5°	608.9	608.9	622.3	637.8	642.0
50°	568.6	566.5	582.0	594.4	597.5
52.5°	527.2	524.1	536.5	546.9	551.0
55°	482.8	479.7	489.0	499.3	503.4
57.5°	436.2	432.1	442.4	451.8	453.8
60°	392.8	386.6	394.9	400.1	405.2
62.5°	349.4	342.2	348.4	351.5	355.6
65°	305.0	297.7	302.9	305.0	310.1
67.5°	262.6	257.4	258.4	261.5	263.6
70°	224.3	218.1	218.1	218.1	219.2
72.5°	189.2	179.9	178.8	179.9	179.9
75°	150.9	144.7	142.7	142.7	141.6
77.5°	120.9	112.7	111.6	109.6	107.5
80°	87.9	80.6	78.6	77.5	76.5
82.5°	61.0	54.8	52.7	50.7	47.6
85°	36.2	32.0	27.9	24.8	21.7
87.5°	13.4	12.4	10.3	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)