

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P253114

Luminaire Tested: **22RTC-24-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P253114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1803-679-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RTC-24-UNV-L840-CD1-U
Description: 2X2 RTC
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2692.0 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

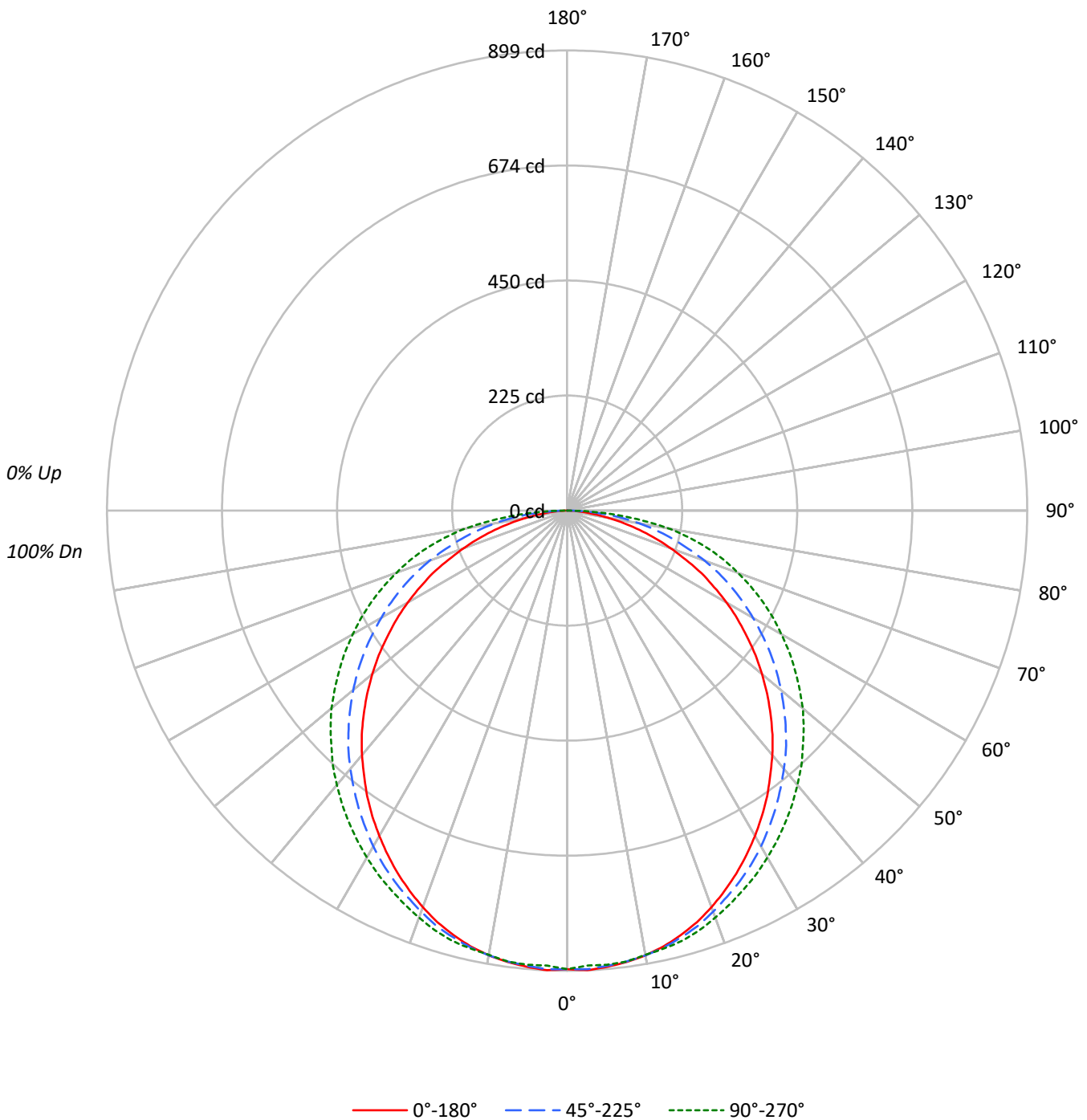
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P253114

CATALOG NUMBER: 22RTC-24-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P253114

CATALOG NUMBER: 22RTC-24-UNV-L840-CD1-U

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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	63	86	76	68	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	45	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2411	2411	2411
5°	2417	2411	2406
10°	2411	2411	2408
15°	2392	2404	2424
20°	2361	2388	2424
25°	2323	2372	2424
30°	2280	2354	2431
35°	2238	2333	2441
40°	2191	2314	2459
45°	2138	2299	2479
50°	2080	2283	2516
55°	2012	2273	2548
60°	1936	2258	2602
65°	1845	2258	2684
70°	1695	2246	2790
75°	1522	2219	2958
80°	1261	2221	3130
85°	892	2069	2927



TEST NUMBER: P253114

CATALOG NUMBER: 22RTC-24-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	3.2
10°-20°	243.6	9.0
20°-30°	368.3	13.7
30°-40°	445.0	16.5
40°-50°	467.5	17.4
50°-60°	434.0	16.1
60°-70°	350.5	13.0
70°-80°	225.8	8.4
80°-90°	72.4	2.7
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°	696.8	25.9
0°-40°	1141.8	42.4
0°-60°	2043.3	75.9
0°-90°	2692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	895	895	893	891	891	85
15°	859	860	863	868	870	242
25°	782	786	799	811	816	360
35°	681	689	710	733	743	426
45°	562	573	604	638	652	433
55°	429	444	484	527	543	384
65°	290	308	355	401	422	285
75°	146	168	213	259	284	155
85°	29	43	67	84	95	36
90°	0	0	0	0	0	



TEST NUMBER: P253114

CATALOG NUMBER: 22RTC-24-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8
2.5°	898.8	898.8	898.8	897.8	898.8	898.8	897.8	897.8	896.8	896.8	896.8
5°	894.7	894.7	893.7	893.7	894.7	894.7	893.7	893.7	892.7	892.7	892.7
7.5°	889.6	889.6	889.6	889.6	889.6	889.6	888.5	888.5	888.5	889.6	888.5
10°	882.4	882.4	882.4	882.4	882.4	882.4	882.4	881.3	881.3	882.4	882.4
12.5°	872.0	873.1	872.0	872.0	873.1	873.1	872.0	872.0	872.0	874.1	874.1
15°	858.6	858.6	858.6	858.6	859.7	859.7	859.7	860.7	860.7	862.8	862.8
17.5°	843.2	843.2	843.2	843.2	844.2	845.2	845.2	846.3	847.3	849.4	850.4
20°	824.6	825.7	824.6	825.7	826.7	827.7	827.7	828.8	830.8	832.9	833.9
22.5°	804.0	805.0	805.0	806.1	807.1	808.1	808.1	810.2	812.3	814.3	816.4
25°	782.4	783.4	783.4	784.4	785.5	786.5	787.5	789.6	792.7	795.8	798.9
27.5°	758.7	759.7	759.7	761.7	762.8	763.8	765.9	767.9	772.1	775.1	779.3
30°	733.9	734.9	734.9	736.0	738.0	740.1	742.2	745.3	748.3	752.5	757.6
32.5°	708.1	709.2	709.2	710.2	713.3	715.4	716.4	720.5	724.6	728.8	733.9
35°	681.3	681.3	681.3	684.4	686.5	688.6	689.6	694.7	699.9	705.1	710.2
37.5°	651.5	652.5	652.5	656.6	659.7	661.8	663.8	667.9	674.1	679.3	684.4
40°	623.6	623.6	623.6	626.7	630.8	632.9	636.0	640.1	647.3	652.5	658.7
42.5°	593.7	594.8	594.8	597.9	602.0	604.0	607.1	612.3	619.5	625.7	632.9
45°	561.8	562.8	562.8	566.9	571.1	573.1	577.2	582.4	589.6	596.8	604.0
47.5°	529.8	529.8	531.9	537.0	540.1	543.2	545.3	552.5	559.7	568.0	575.2
50°	496.8	496.8	499.9	503.0	508.2	511.3	514.4	521.6	529.8	537.0	545.3
52.5°	463.9	463.9	465.9	471.1	475.2	478.3	481.4	489.6	497.9	506.1	515.4
55°	428.8	430.9	432.9	436.0	441.2	444.3	448.4	456.6	465.9	474.2	484.5
57.5°	394.8	395.8	397.9	404.1	407.2	410.3	414.4	422.6	431.9	442.2	451.5
60°	359.7	359.7	362.8	367.0	373.1	376.2	381.4	389.6	398.9	409.2	419.5
62.5°	323.7	324.7	328.8	335.0	338.1	343.3	347.4	355.6	365.9	375.2	387.6
65°	289.7	289.7	292.7	300.0	303.1	308.2	312.3	321.6	331.9	342.2	354.6
67.5°	250.5	252.5	255.6	262.8	269.0	273.2	277.3	287.6	297.9	308.2	320.6
70°	215.4	217.5	220.6	225.7	231.9	236.0	240.2	249.4	260.8	273.2	285.5
72.5°	181.4	182.4	185.5	190.7	196.9	202.0	206.2	215.4	225.7	236.0	248.4
75°	146.4	148.4	151.5	156.7	162.9	168.0	171.1	180.4	190.7	201.0	213.4
77.5°	113.4	115.4	118.5	123.7	129.9	133.0	137.1	146.4	156.7	167.0	178.3
80°	81.4	83.5	86.6	91.7	97.9	101.0	105.1	113.4	122.7	131.9	143.3
82.5°	52.6	53.6	57.7	61.8	68.0	71.1	74.2	82.5	90.7	99.0	107.2
85°	28.9	28.9	30.9	35.0	40.2	43.3	45.4	50.5	56.7	61.8	67.0
87.5°	10.3	10.3	11.3	13.4	15.5	16.5	17.5	19.6	22.7	25.8	28.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P253114

CATALOG NUMBER: 22RTC-24-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8	895.8
2.5°	895.8	894.7	893.7	892.7	891.6	891.6	890.6	889.6	889.6	889.6
5°	892.7	891.6	891.6	890.6	890.6	890.6	890.6	889.6	889.6	890.6
7.5°	888.5	888.5	888.5	888.5	888.5	888.5	888.5	888.5	888.5	888.5
10°	882.4	882.4	882.4	881.3	881.3	881.3	881.3	881.3	881.3	881.3
12.5°	874.1	874.1	874.1	875.1	875.1	875.1	875.1	876.2	876.2	876.2
15°	864.8	865.9	865.9	866.9	867.9	867.9	869.0	869.0	870.0	870.0
17.5°	852.5	853.5	855.6	856.6	856.6	857.6	858.6	859.7	859.7	859.7
20°	837.0	839.1	840.1	842.2	842.2	843.2	844.2	845.2	846.3	846.3
22.5°	819.5	821.5	824.6	826.7	826.7	827.7	829.8	830.8	831.8	831.8
25°	801.9	805.0	807.1	810.2	811.2	812.3	814.3	815.3	816.4	816.4
27.5°	783.4	785.5	789.6	792.7	793.7	794.7	797.8	799.9	799.9	800.9
30°	761.7	765.9	770.0	773.1	774.1	776.2	779.3	781.3	782.4	782.4
32.5°	739.1	743.2	748.3	752.5	754.5	755.6	759.7	761.7	762.8	763.8
35°	715.4	720.5	726.7	730.8	732.9	734.9	739.1	741.1	743.2	743.2
37.5°	691.7	697.8	703.0	709.2	711.2	713.3	717.4	719.5	721.5	722.6
40°	666.9	673.1	679.3	685.5	687.5	690.6	693.7	696.8	698.9	699.9
42.5°	641.1	647.3	654.5	660.7	664.9	666.9	671.0	674.1	676.2	677.2
45°	613.3	620.5	627.7	635.0	638.1	640.1	645.3	649.4	651.5	651.5
47.5°	584.5	592.7	600.9	608.2	612.3	614.3	619.5	622.6	625.7	626.7
50°	555.6	564.9	573.1	580.3	584.5	587.5	592.7	595.8	598.9	600.9
52.5°	524.7	535.0	543.2	551.5	555.6	558.7	564.9	569.0	571.1	572.1
55°	494.8	505.1	514.4	522.6	526.7	528.8	536.0	540.1	542.2	543.2
57.5°	462.8	473.1	482.4	490.7	495.8	499.9	505.1	510.2	512.3	514.4
60°	430.9	441.2	451.5	460.8	464.9	468.0	475.2	479.3	482.4	483.4
62.5°	397.9	410.3	419.5	428.8	434.0	437.1	443.2	448.4	452.5	453.5
65°	364.9	376.2	386.5	396.9	401.0	405.1	411.3	417.5	420.6	421.6
67.5°	331.9	343.3	353.6	362.8	368.0	372.1	379.3	384.5	388.6	388.6
70°	296.9	308.2	319.5	328.8	334.0	338.1	345.3	350.5	354.6	354.6
72.5°	258.7	273.2	283.5	293.8	297.9	303.1	309.2	315.4	319.5	321.6
75°	223.7	235.0	245.3	255.6	258.7	265.9	273.2	279.3	283.5	284.5
77.5°	187.6	198.9	209.2	218.5	222.6	226.8	235.0	239.1	243.3	244.3
80°	152.6	162.9	173.2	180.4	183.5	187.6	192.8	196.9	200.0	202.0
82.5°	113.4	120.6	126.8	131.9	134.0	137.1	142.2	144.3	146.4	148.4
85°	70.1	75.2	79.4	83.5	84.5	87.6	90.7	91.7	93.8	94.8
87.5°	29.9	34.0	36.1	37.1	38.1	40.2	43.3	43.3	45.4	44.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)