

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1025952

Luminaire Tested: S124RDIP-B1020D1035UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025952
REPORT IS A COMBINATION OF REPORTS P998852 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1035UB40-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

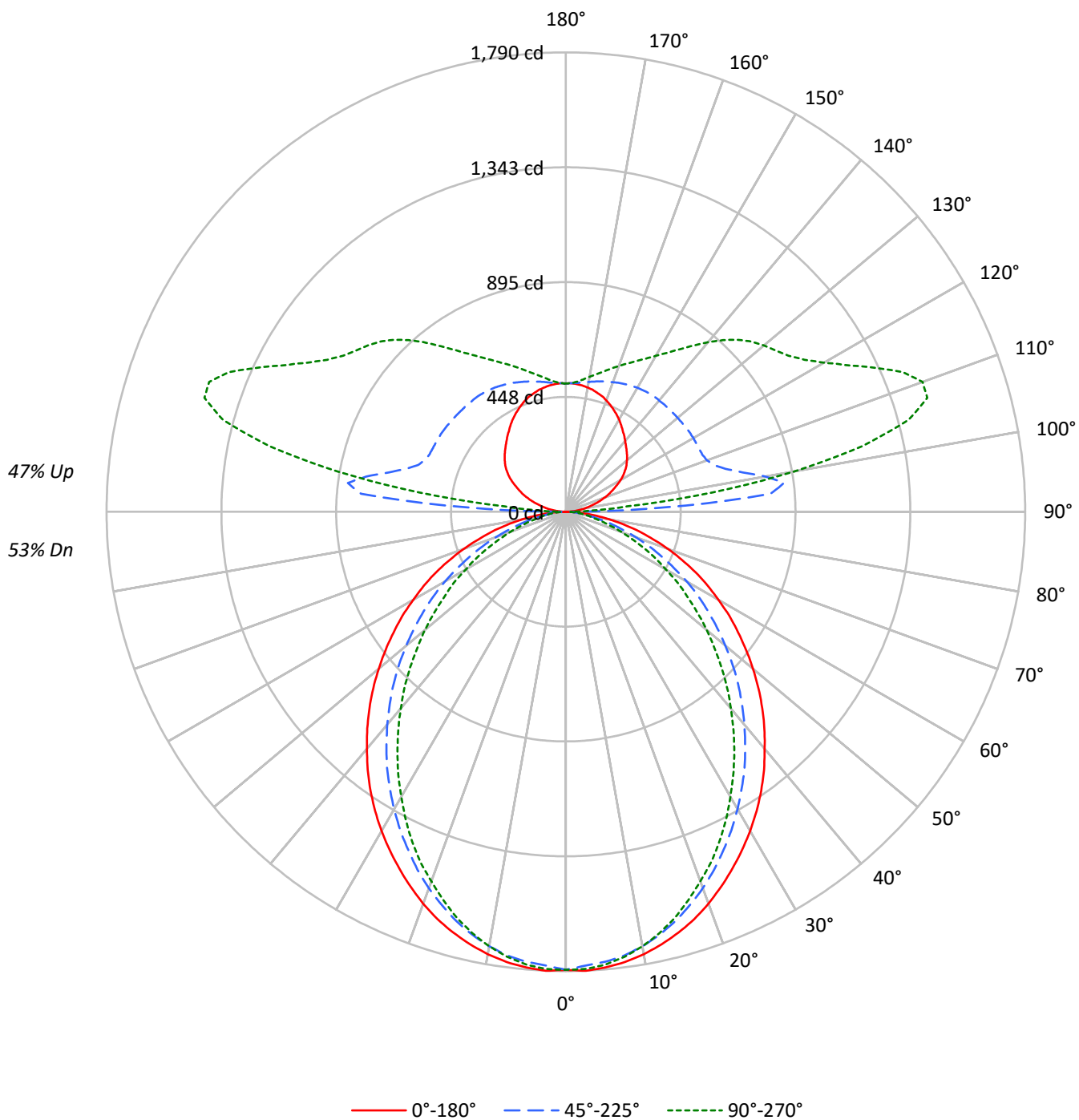
Lumens per Lamp: N/A
Luminaire Lumens: 7776.3 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
Input Voltage (V):
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85		71	71	71		59
1	99	95	91	87	91	88	84	82	75	73	70		63	62	60		53
2	90	83	77	72	83	77	72	67	66	62	59		56	53	51		47
3	82	73	66	60	76	68	62	57	59	54	50		50	46	43		42
4	76	65	57	51	70	60	54	48	52	47	43		44	40	37		37
5	69	58	50	44	64	54	47	42	47	41	37		40	36	32		34
6	64	52	44	38	59	49	41	36	42	37	32		36	32	28		31
7	59	47	39	34	55	44	37	32	38	33	29		33	29	25		28
8	55	43	35	30	51	40	33	28	35	29	26		30	26	23		26
9	51	39	32	27	48	37	30	25	32	27	23		28	24	20		24
10	48	36	29	24	45	34	27	23	30	24	21		26	22	19		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	2.2
10°-20°	467.9	6.0
20°-30°	675.6	8.7
30°-40°	765.7	9.8
40°-50°	739.3	9.5
50°-60°	614.6	7.9
60°-70°	424.2	5.5
70°-80°	214.4	2.8
80°-90°	56.4	0.7
90°-100°	371.5	4.8
100°-110°	755.7	9.7
110°-120°	673.6	8.7
120°-130°	565.8	7.3
130°-140°	472.2	6.1
140°-150°	360.6	4.6
150°-160°	253.5	3.3
160°-170°	149.1	1.9
170°-180°	48.5	0.6
0°-30°	1311.4	16.9
0°-40°	2077.1	26.7
0°-60°	3431.0	44.1
0°-90°	4125.9	53.1
90°-120°	1800.8	23.2
90°-150°	3199.4	41.1
90°-180°	3650.0	46.9
0°-180°	7776.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	1	8	18	20	21	6
95°	32	102	801	396	240	36
105°	115	167	645	1388	1383	122
115°	202	254	575	1105	1328	201
125°	282	335	572	940	1059	251
135°	335	399	567	834	947	259
145°	386	442	564	704	773	242
155°	439	474	548	621	648	203
165°	479	493	526	557	565	135
175°	499	500	504	511	509	47
180°	500	500	500	500	500	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	1.0	7.9	17.7	19.7	20.6
92.5°	13.8	75.6	385.2	127.2	89.4
95°	32.4	102.2	800.9	396.5	239.8
97.5°	54.0	113.0	856.9	809.8	575.9
100°	74.7	127.8	790.1	1120.2	901.1
102.5°	94.3	145.4	706.6	1314.8	1184.2
105°	115.0	166.6	644.6	1388.1	1382.7
107.5°	137.6	188.2	604.4	1366.0	1477.0
110°	160.2	209.8	585.7	1287.4	1479.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	181.8	231.4	576.8	1191.0	1421.0
115°	202.4	254.0	574.9	1104.6	1327.6
117.5°	224.1	275.2	573.9	1036.8	1236.2
120°	245.7	295.8	573.9	991.0	1161.5
122.5°	265.3	316.0	572.9	961.1	1102.6
125°	282.0	335.1	571.9	940.0	1059.3
127.5°	297.8	352.8	570.0	919.8	1031.8
130°	310.5	370.0	569.0	895.8	1008.2
132.5°	323.3	384.8	568.0	867.2	981.7
135°	335.1	399.0	567.0	834.3	947.3
137.5°	346.9	411.2	567.0	798.9	907.0
140°	359.7	422.6	566.0	764.6	862.8
142.5°	373.4	432.9	566.0	732.6	815.6
145°	386.2	442.2	564.1	703.6	773.4
147.5°	400.9	451.0	561.1	679.5	734.1
150°	414.7	459.4	558.2	657.4	701.6
152.5°	427.5	467.2	553.3	638.8	672.2
155°	439.3	474.2	548.3	621.1	647.6
157.5°	451.1	480.5	543.4	604.3	625.0
160°	461.9	485.9	537.5	587.7	604.4
162.5°	471.7	490.4	531.6	571.4	584.7
165°	478.6	493.4	525.7	556.7	565.1
167.5°	486.4	495.8	519.8	543.9	549.3
170°	491.3	497.8	514.0	531.2	534.6
172.5°	496.3	499.2	508.1	519.8	519.8
175°	499.2	500.2	504.1	511.0	509.0
177.5°	501.2	500.2	501.2	504.6	501.2
180°	500.2	500.2	500.2	500.2	500.2

(END OF REPORT)