

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: P1025957

Luminaire Tested: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025957
REPORT IS A COMBINATION OF REPORTS P998857 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

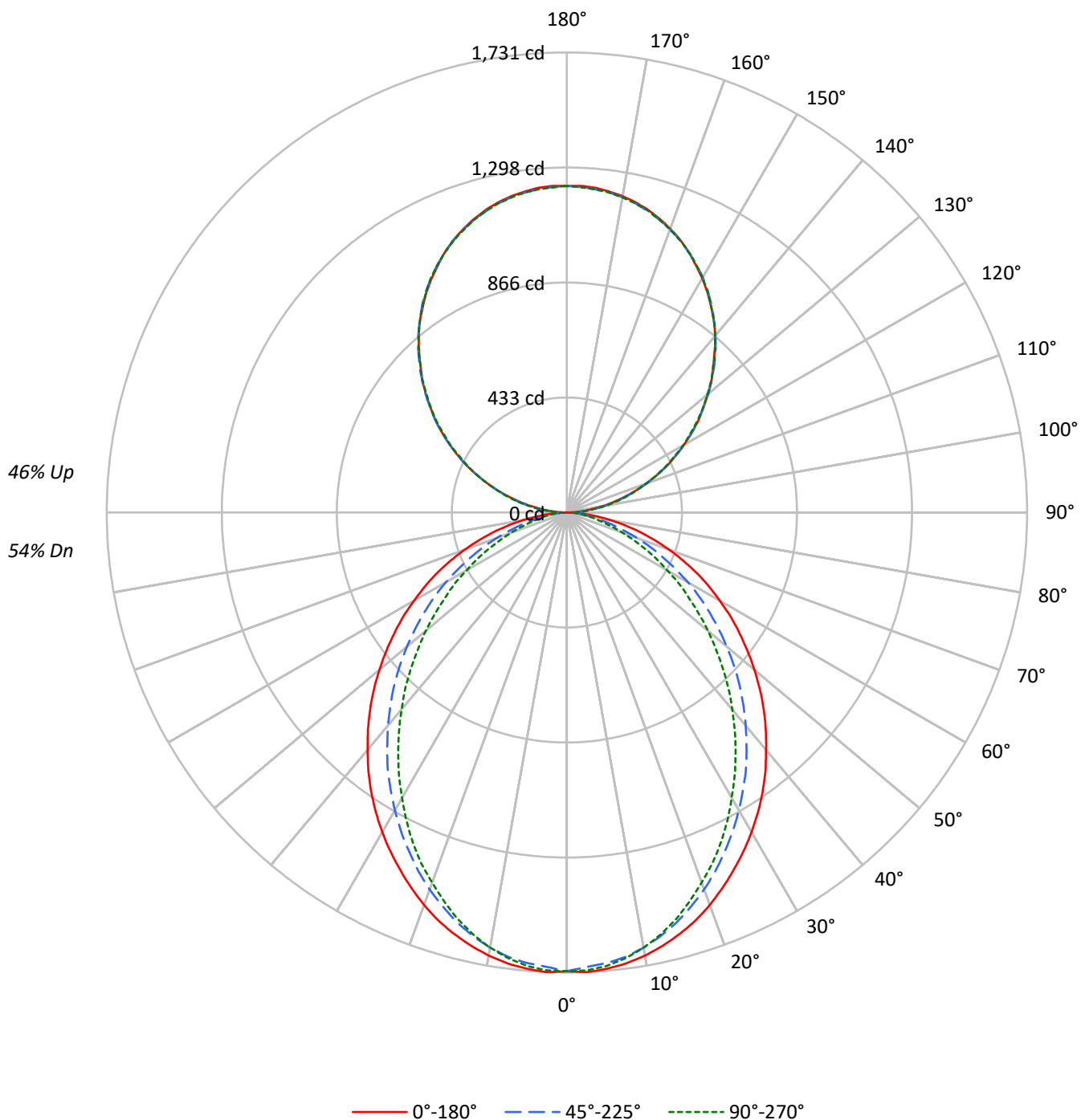
Lumens per Lamp: N/A
Luminaire Lumens: 7399.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1025957

CATALOG NUMBER: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1025957

CATALOG NUMBER: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

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	30	10
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	95	91	88	92	88	85	82	75	73	71	64	62	61	53	52	51
2	90	83	77	72	84	77	72	68	66	63	59	56	54	51	47	45	43
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	39	37
4	76	65	57	51	70	61	54	48	52	47	43	45	41	38	38	35	32
5	70	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28
6	64	52	44	38	59	49	42	36	43	37	33	37	32	29	31	28	25
7	59	47	39	34	55	44	37	32	39	33	29	33	29	26	28	25	22
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20
9	51	39	32	27	48	37	30	26	32	27	23	28	24	21	24	21	18
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

TEST NUMBER: P1025957

CATALOG NUMBER: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.2
10°-20°	452.5	6.1
20°-30°	653.3	8.8
30°-40°	740.4	10.0
40°-50°	714.9	9.7
50°-60°	594.3	8.0
60°-70°	410.2	5.5
70°-80°	207.3	2.8
80°-90°	55.3	0.7
90°-100°	80.1	1.1
100°-110°	239.8	3.2
110°-120°	407.4	5.5
120°-130°	537.3	7.3
130°-140°	603.5	8.2
140°-150°	593.2	8.0
150°-160°	498.9	6.7
160°-170°	332.0	4.5
170°-180°	116.2	1.6
0°-30°	1268.1	17.1
0°-40°	2008.6	27.1
0°-60°	3317.8	44.8
0°-90°	3990.6	53.9
90°-120°	727.4	9.8
90°-150°	2461.3	33.3
90°-180°	3408.0	46.1
0°-180°	7399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	3	13	21	27	28	8
95°	57	66	72	75	75	62
105°	221	222	226	229	232	235
115°	414	414	412	411	410	409
125°	603	603	602	600	598	538
135°	778	784	784	782	779	602
145°	945	949	950	949	946	592
155°	1083	1083	1082	1086	1082	498
165°	1179	1176	1174	1180	1176	332
175°	1226	1222	1221	1228	1221	116
180°	1228	1228	1228	1228	1228	

TEST NUMBER: P1025957

CATALOG NUMBER: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	2.9	13.3	20.9	26.6	28.5
92.5°	24.7	37.1	41.8	44.7	45.6
95°	57.0	65.6	72.2	75.1	75.1
97.5°	91.2	98.8	106.4	110.2	110.2
100°	133.0	136.8	145.4	147.3	147.3
102.5°	176.7	177.7	185.3	188.1	189.1
105°	221.4	222.3	226.1	229.0	231.8
107.5°	267.9	268.9	269.8	273.6	272.7
110°	315.4	317.3	316.4	314.5	317.3



TEST NUMBER: P1025957

CATALOG NUMBER: S124RDIP-B1020D1035UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.8	364.8	362.9	362.9	362.9
115°	414.2	414.2	412.3	411.4	410.4
117.5°	460.8	460.8	459.8	457.0	454.1
120°	507.3	511.1	508.3	503.5	505.4
122.5°	555.8	556.7	555.8	552.9	548.2
125°	603.3	603.3	602.3	600.4	598.5
127.5°	646.0	648.9	647.0	645.1	644.1
130°	691.6	694.5	694.5	692.6	688.8
132.5°	738.2	740.1	739.1	737.2	736.3
135°	778.1	783.8	783.8	781.9	779.0
137.5°	822.7	825.6	827.5	824.6	825.6
140°	867.4	869.3	869.3	868.3	867.4
142.5°	908.2	910.1	909.2	909.2	909.2
145°	945.3	949.1	950.0	949.1	946.2
147.5°	983.3	988.0	987.1	986.1	985.2
150°	1017.5	1021.3	1021.3	1021.3	1020.3
152.5°	1049.8	1051.7	1052.6	1055.5	1052.6
155°	1083.0	1083.0	1082.1	1085.9	1082.1
157.5°	1111.6	1109.7	1109.7	1112.5	1109.7
160°	1136.3	1135.3	1134.4	1137.2	1132.5
162.5°	1159.1	1156.2	1155.3	1161.0	1156.2
165°	1179.0	1176.2	1174.3	1180.0	1176.2
167.5°	1195.2	1191.4	1191.4	1197.1	1191.4
170°	1208.5	1203.7	1204.7	1210.4	1203.7
172.5°	1218.0	1214.2	1214.2	1220.8	1214.2
175°	1226.5	1221.8	1220.8	1227.5	1220.8
177.5°	1230.3	1225.6	1225.6	1232.2	1224.6
180°	1228.4	1228.4	1228.4	1228.4	1228.4

(END OF REPORT)