

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: P1025976

Luminaire Tested: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025976
REPORT IS A COMBINATION OF REPORTS P998886 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

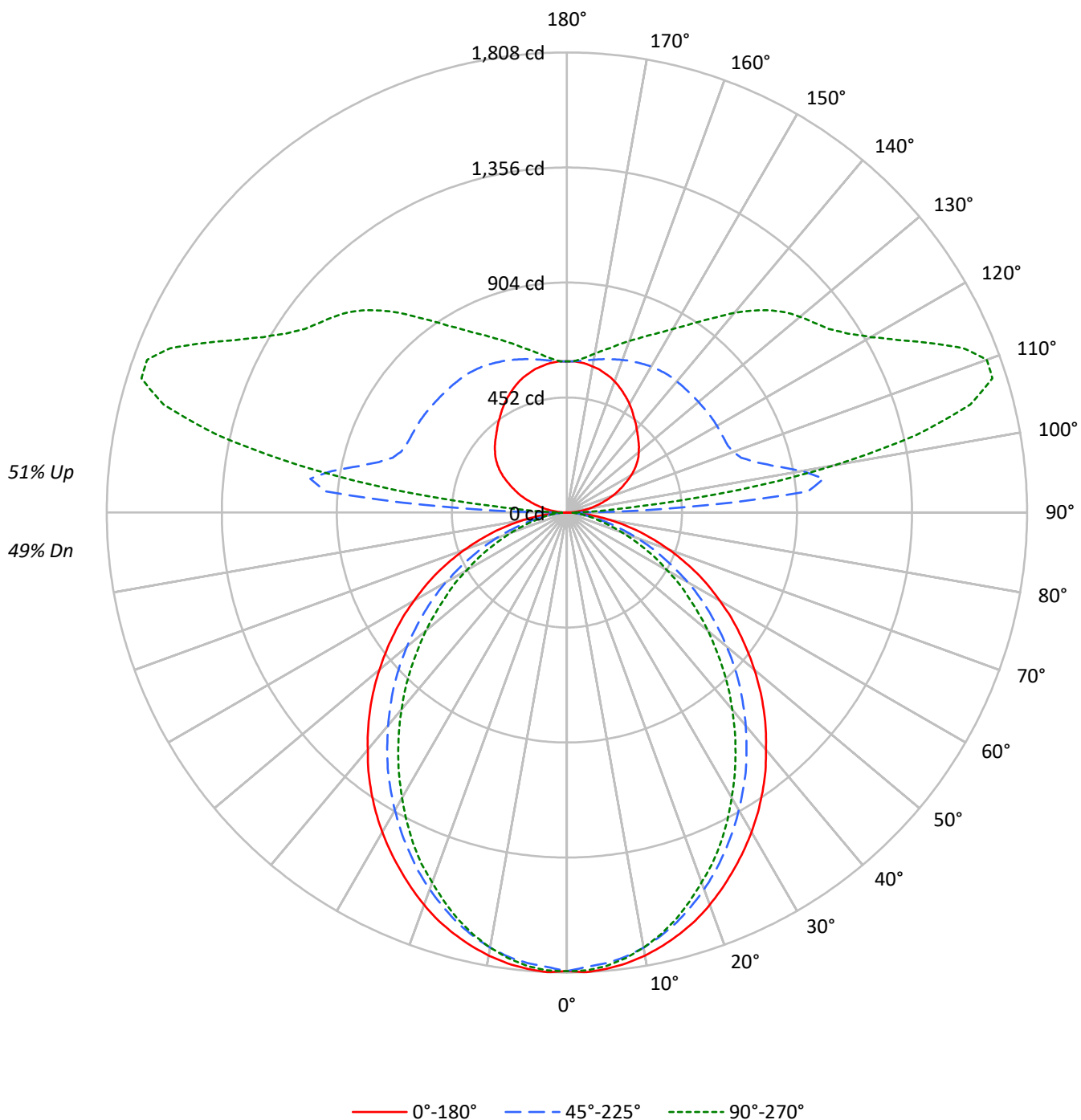
Lumens per Lamp: N/A
Luminaire Lumens: 8499.6 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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: P1025976

CATALOG NUMBER: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1025976

CATALOG NUMBER: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	26	23
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14700	14262	14264
10°	14576	13812	13648
15°	14375	13252	12922
20°	14113	12613	12093
25°	13785	11923	11284
30°	13464	11220	10375
35°	13112	10508	9487
40°	12692	9740	8574
45°	12298	8979	7671
50°	11851	8148	6753
55°	11367	7296	5807
60°	10831	6391	4872
65°	10312	5353	3970
70°	9575	4261	3035
75°	8631	3101	2122
80°	7210	1904	1525
85°	5421	1097	838

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12298 cd/sqm

TEST NUMBER: P1025976

CATALOG NUMBER: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	2.0
10°-20°	472.6	5.6
20°-30°	682.3	8.0
30°-40°	773.3	9.1
40°-50°	746.6	8.8
50°-60°	620.7	7.3
60°-70°	428.4	5.0
70°-80°	216.5	2.5
80°-90°	57.2	0.7
90°-100°	441.0	5.2
100°-110°	896.9	10.6
110°-120°	799.4	9.4
120°-130°	671.5	7.9
130°-140°	560.4	6.6
140°-150°	428.0	5.0
150°-160°	300.8	3.5
160°-170°	176.9	2.1
170°-180°	57.5	0.7
0°-30°	1324.4	15.6
0°-40°	2097.7	24.7
0°-60°	3465.1	40.8
0°-90°	4167.2	49.0
90°-120°	2137.3	25.1
90°-150°	3797.1	44.7
90°-180°	4332.0	51.0
0°-180°	8499.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1803	1803	1803	1803	1803	
5°	1800	1794	1778	1792	1789	171
15°	1714	1702	1667	1664	1655	483
25°	1550	1525	1468	1445	1431	714
35°	1340	1296	1227	1180	1155	838
45°	1093	1042	959	892	867	843
55°	828	773	683	611	585	741
65°	563	504	415	356	340	556
75°	300	248	184	152	144	316
85°	74	47	43	40	40	82
90°	1	9	21	23	24	7
95°	38	121	950	471	285	42
105°	136	198	765	1647	1641	145
115°	240	301	682	1311	1576	238
125°	335	398	679	1116	1257	298
135°	398	474	673	990	1124	307
145°	458	525	670	835	918	288
155°	521	563	651	737	769	240
165°	568	586	624	661	671	160
175°	592	594	598	606	604	56
180°	594	594	594	594	594	

TEST NUMBER: P1025976

CATALOG NUMBER: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.6	1802.6	1802.6	1802.6	1802.6
2.5°	1808.1	1802.6	1787.4	1802.6	1801.2
5°	1799.8	1794.3	1777.7	1791.5	1788.8
7.5°	1787.4	1781.9	1761.2	1770.8	1766.7
10°	1768.1	1761.2	1736.3	1741.8	1736.3
12.5°	1743.2	1734.9	1704.6	1707.3	1699.0
15°	1714.2	1701.8	1667.3	1664.5	1654.9
17.5°	1681.1	1663.2	1623.1	1616.2	1602.4
20°	1641.1	1623.1	1576.2	1565.2	1547.2
22.5°	1596.9	1576.2	1525.1	1507.2	1493.4
25°	1550.0	1525.1	1468.5	1445.1	1431.3
27.5°	1501.7	1471.3	1412.0	1384.4	1365.0
30°	1450.6	1416.1	1351.2	1316.7	1294.6
32.5°	1396.8	1356.7	1289.1	1247.7	1227.0
35°	1340.2	1296.0	1227.0	1180.1	1155.2
37.5°	1280.8	1235.3	1159.4	1108.3	1083.5
40°	1217.3	1171.8	1093.1	1035.2	1010.3
42.5°	1156.6	1108.3	1025.5	966.1	939.9
45°	1093.1	1042.1	959.2	891.6	866.8
47.5°	1028.3	975.8	890.2	819.8	792.2
50°	962.0	908.2	819.8	750.8	724.6
52.5°	894.4	841.9	750.8	680.4	652.8
55°	828.1	772.9	683.2	611.4	585.2
57.5°	763.3	705.3	617.0	543.8	524.5
60°	692.9	637.7	549.3	477.6	455.5
62.5°	629.4	571.4	480.3	415.4	398.9
65°	563.1	503.8	415.4	356.1	339.5
67.5°	494.1	437.5	354.7	302.3	282.9
70°	429.2	371.3	292.6	247.1	233.3
72.5°	360.2	309.2	236.0	198.8	186.3
75°	299.5	248.4	183.6	151.8	143.5
77.5°	236.0	191.8	136.6	114.6	111.8
80°	175.3	135.3	93.9	89.7	88.3
82.5°	122.8	87.0	67.6	64.9	63.5
85°	74.5	46.9	42.8	40.0	40.0
87.5°	31.7	20.7	19.3	17.9	19.3
90°	1.2	9.3	21.0	23.3	24.5
92.5°	16.3	89.8	457.2	151.0	106.1
95°	38.5	121.3	950.5	470.6	284.6
97.5°	64.1	134.1	1017.0	961.0	683.4
100°	88.6	151.6	937.7	1329.6	1069.5
102.5°	112.0	172.6	838.6	1560.5	1405.4
105°	136.5	197.7	765.1	1647.4	1641.0
107.5°	163.3	223.4	717.3	1621.2	1752.9
110°	190.1	249.0	695.1	1527.8	1755.3

TEST NUMBER: P1025976

CATALOG NUMBER: S124RDIP-B1020D1205UB35-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.8	274.6	684.6	1413.6	1686.5
115°	240.3	301.4	682.3	1310.9	1575.7
117.5°	265.9	326.5	681.1	1230.4	1467.2
120°	291.6	351.0	681.1	1176.2	1378.6
122.5°	314.9	375.0	680.0	1140.6	1308.6
125°	334.7	397.7	678.8	1115.6	1257.3
127.5°	353.4	418.7	676.5	1091.6	1224.6
130°	368.5	439.1	675.3	1063.1	1196.6
132.5°	383.7	456.6	674.1	1029.2	1165.1
135°	397.7	473.6	673.0	990.2	1124.3
137.5°	411.7	488.1	673.0	948.2	1076.5
140°	426.9	501.5	671.8	907.4	1024.0
142.5°	443.2	513.8	671.8	869.5	968.0
145°	458.4	524.8	669.5	835.0	917.9
147.5°	475.8	535.4	666.0	806.5	871.2
150°	492.2	545.2	662.5	780.2	832.7
152.5°	507.3	554.6	656.6	758.1	797.7
155°	521.3	562.8	650.8	737.1	768.6
157.5°	535.3	570.3	645.0	717.2	741.8
160°	548.2	576.7	638.0	697.4	717.3
162.5°	559.8	582.0	631.0	678.2	693.9
165°	568.0	585.5	624.0	660.7	670.6
167.5°	577.3	588.4	617.0	645.6	652.0
170°	583.1	590.8	610.0	630.4	634.5
172.5°	589.0	592.4	603.0	617.0	617.0
175°	592.5	593.6	598.3	606.5	604.1
177.5°	594.8	593.6	594.8	598.9	594.8
180°	593.6	593.6	593.6	593.6	593.6

(END OF REPORT)