

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: P1025964

Luminaire Tested: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025964
REPORT IS A COMBINATION OF REPORTS P998864 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

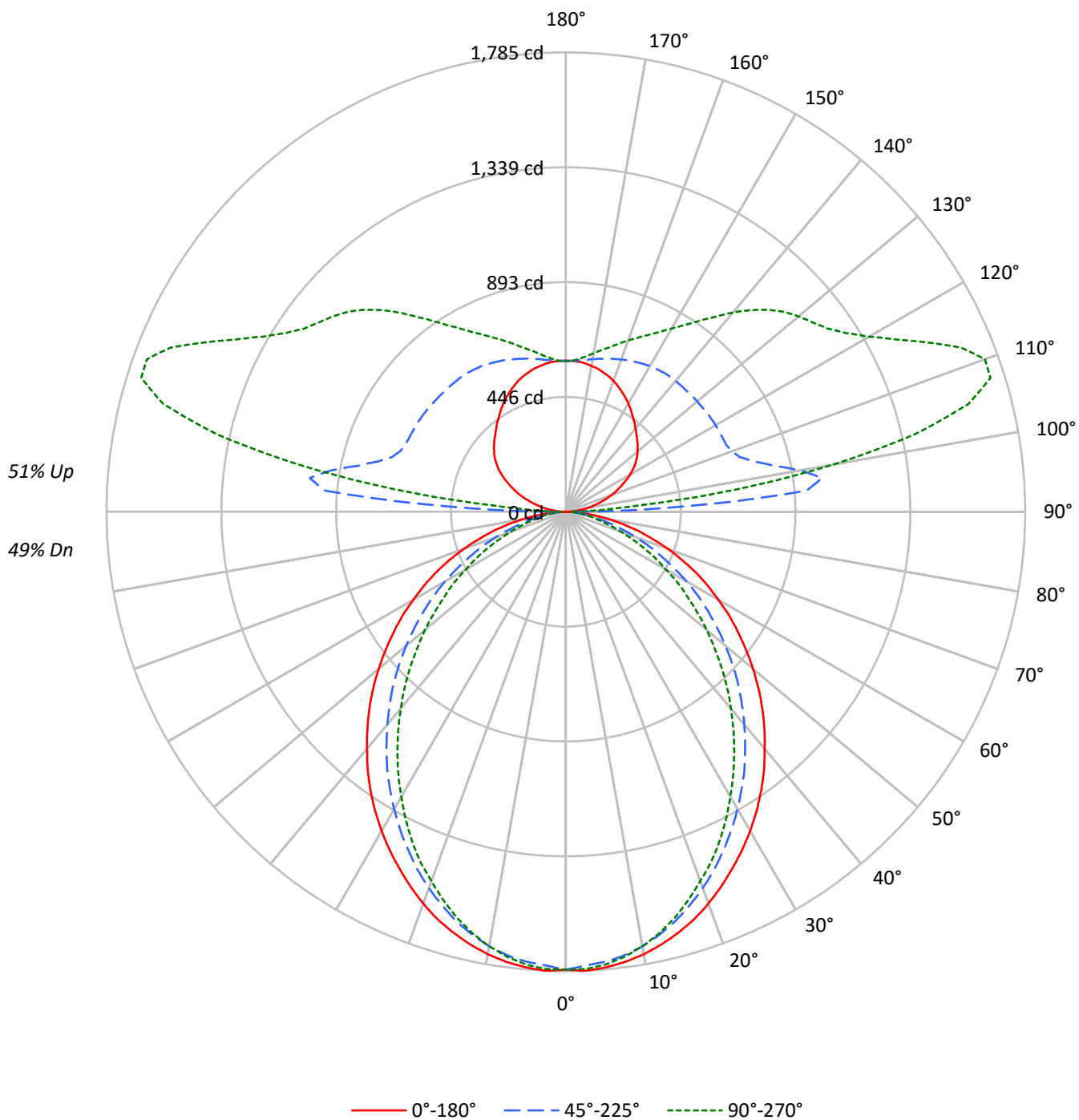
Lumens per Lamp: N/A
Luminaire Lumens: 8390.5 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1025964

CATALOG NUMBER: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4

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	30	10
RCR																	
0	107	107	107	107	99	99	99	99	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°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

TEST NUMBER: P1025964

CATALOG NUMBER: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.0
10°-20°	466.6	5.6
20°-30°	673.6	8.0
30°-40°	763.5	9.1
40°-50°	737.1	8.8
50°-60°	612.8	7.3
60°-70°	423.0	5.0
70°-80°	213.7	2.5
80°-90°	56.5	0.7
90°-100°	435.3	5.2
100°-110°	885.3	10.6
110°-120°	789.1	9.4
120°-130°	662.8	7.9
130°-140°	553.1	6.6
140°-150°	422.4	5.0
150°-160°	296.9	3.5
160°-170°	174.6	2.1
170°-180°	56.8	0.7
0°-30°	1307.6	15.6
0°-40°	2071.0	24.7
0°-60°	3421.0	40.8
0°-90°	4114.2	49.0
90°-120°	2109.6	25.1
90°-150°	3748.0	44.7
90°-180°	4276.0	51.0
0°-180°	8390.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	1	9	21	23	24	7
95°	38	120	938	464	281	42
105°	135	195	755	1626	1620	143
115°	237	298	674	1294	1555	235
125°	330	392	670	1101	1241	294
135°	393	467	664	977	1110	303
145°	452	518	661	824	906	284
155°	515	555	642	728	759	237
165°	561	578	616	652	662	158
175°	585	586	591	599	596	56
180°	586	586	586	586	586	

TEST NUMBER: P1025964

CATALOG NUMBER: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
90°	1.2	9.2	20.7	23.0	24.2
92.5°	16.1	88.6	451.3	149.1	104.8
95°	38.0	119.7	938.2	464.5	280.9
97.5°	63.3	132.4	1003.8	948.6	674.6
100°	87.5	149.6	925.6	1312.4	1055.6
102.5°	110.5	170.4	827.7	1540.3	1387.2
105°	134.7	195.1	755.2	1626.1	1619.7
107.5°	161.2	220.4	708.0	1600.2	1730.3
110°	187.6	245.8	686.1	1508.1	1732.6

TEST NUMBER: P1025964

CATALOG NUMBER: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.0	271.1	675.8	1395.2	1664.6
115°	237.1	297.6	673.5	1294.0	1555.3
117.5°	262.5	322.4	672.3	1214.6	1448.2
120°	287.8	346.5	672.3	1161.0	1360.7
122.5°	310.8	370.2	671.1	1125.8	1291.6
125°	330.4	392.5	670.0	1101.2	1241.0
127.5°	348.8	413.3	667.7	1077.6	1208.8
130°	363.8	433.4	666.5	1049.3	1181.1
132.5°	378.7	450.7	665.4	1015.9	1150.0
135°	392.6	467.4	664.2	977.4	1109.8
137.5°	406.4	481.8	664.2	935.9	1062.6
140°	421.3	495.0	663.1	895.6	1010.8
142.5°	437.5	507.1	663.1	858.2	955.5
145°	452.4	518.0	660.8	824.2	906.0
147.5°	469.7	528.4	657.3	796.0	859.9
150°	485.8	538.2	653.9	770.2	822.0
152.5°	500.8	547.4	648.1	748.2	787.4
155°	514.6	555.4	642.4	727.6	758.6
157.5°	528.4	562.9	636.6	708.0	732.2
160°	541.1	569.2	629.7	688.4	708.0
162.5°	552.6	574.4	622.8	669.4	685.0
165°	560.6	577.9	615.9	652.2	661.9
167.5°	569.8	580.8	609.0	637.2	643.5
170°	575.6	583.1	602.1	622.2	626.3
172.5°	581.4	584.8	595.2	609.0	609.0
175°	584.8	586.0	590.6	598.6	596.3
177.5°	587.1	586.0	587.1	591.2	587.1
180°	586.0	586.0	586.0	586.0	586.0

(END OF REPORT)