

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: P1013249

Luminaire Tested: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013249
REPORT IS A COMBINATION OF REPORTS P998992 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

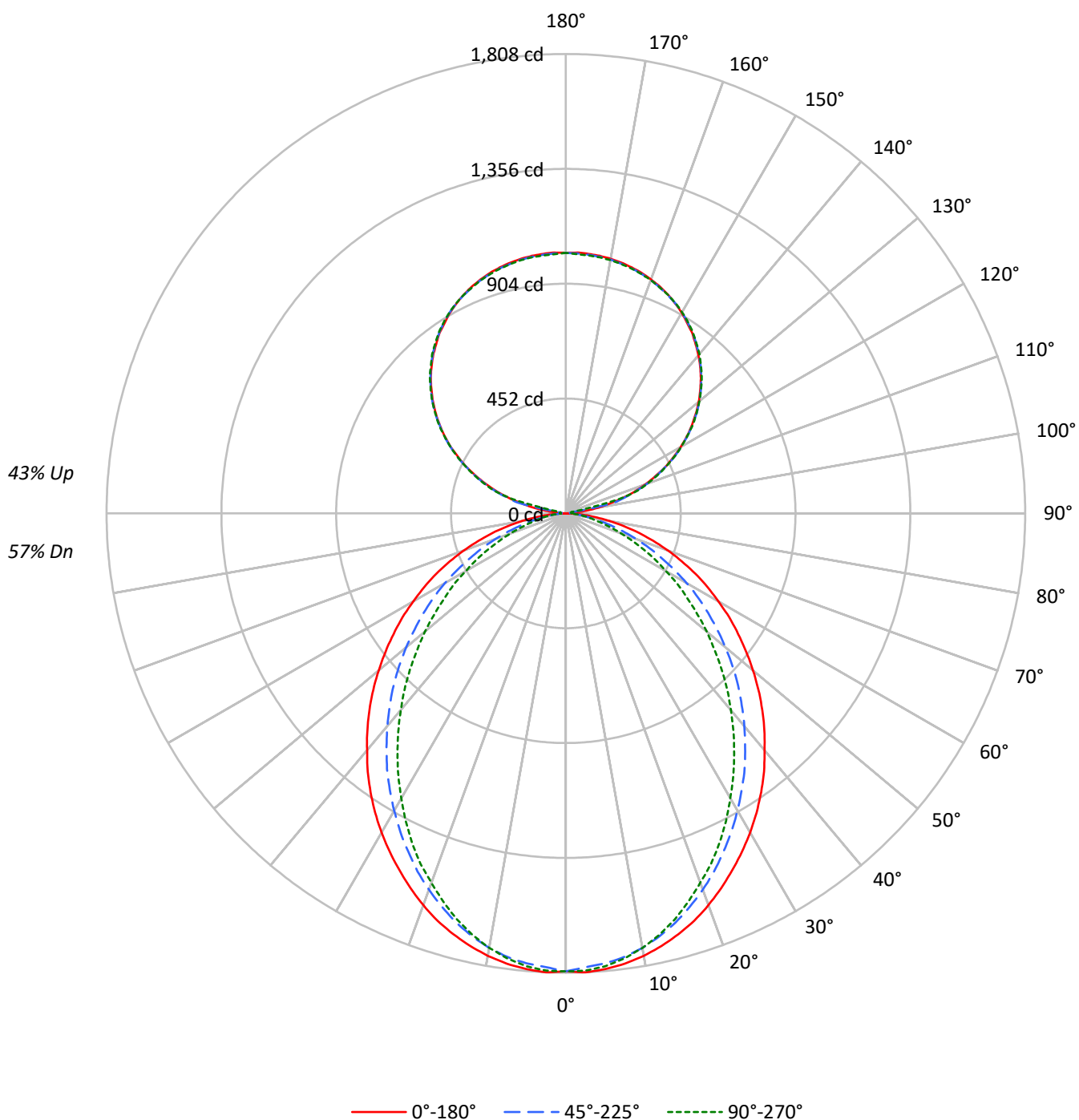
Lumens per Lamp: N/A
Luminaire Lumens: 7340.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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: P1013249

CATALOG NUMBER: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1013249

CATALOG NUMBER: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	61	54	49	54	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	23	20	17

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: P1013249

CATALOG NUMBER: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	2.3
10°-20°	472.6	6.4
20°-30°	682.3	9.3
30°-40°	773.3	10.5
40°-50°	746.6	10.2
50°-60°	620.7	8.5
60°-70°	428.4	5.8
70°-80°	216.5	2.9
80°-90°	57.1	0.8
90°-100°	34.0	0.5
100°-110°	224.1	3.1
110°-120°	428.0	5.8
120°-130°	543.4	7.4
130°-140°	581.3	7.9
140°-150°	543.6	7.4
150°-160°	438.3	6.0
160°-170°	282.7	3.9
170°-180°	97.4	1.3
0°-30°	1324.4	18.0
0°-40°	2097.7	28.6
0°-60°	3465.1	47.2
0°-90°	4167.1	56.8
90°-120°	686.2	9.3
90°-150°	2354.4	32.1
90°-180°	3173.0	43.2
0°-180°	7340.0	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°	2	11	17	22	23	7
95°	42	16	17	22	22	52
105°	231	235	239	246	219	242
115°	431	433	432	434	434	424
125°	606	609	607	610	610	541
135°	752	751	754	755	757	579
145°	867	869	869	870	871	542
155°	950	951	949	952	950	438
165°	1002	998	998	1005	998	283
175°	1025	1021	1022	1028	1019	98
180°	1025	1025	1025	1025	1025	

TEST NUMBER: P1013249

CATALOG NUMBER: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

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°	2.3	10.7	16.9	21.5	23.0
92.5°	11.5	10.0	16.1	20.7	20.7
95°	42.2	16.1	16.9	21.5	22.2
97.5°	80.5	97.4	16.9	20.7	21.5
100°	125.8	139.6	33.7	20.7	21.5
102.5°	176.4	185.6	194.8	22.2	22.2
105°	230.8	235.4	239.3	246.2	218.6
107.5°	280.7	283.0	288.4	292.2	295.3
110°	331.3	333.6	338.2	339.7	342.0

TEST NUMBER: P1013249

CATALOG NUMBER: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	380.4	385.0	386.5	385.8	388.8
115°	431.0	433.3	432.5	434.1	434.1
117.5°	476.3	479.3	481.6	480.9	480.9
120°	522.3	525.3	524.6	526.1	524.6
122.5°	565.2	566.8	568.3	569.1	567.5
125°	605.9	608.9	607.4	609.7	610.5
127.5°	645.0	645.8	649.6	648.8	648.1
130°	682.6	683.3	685.6	686.4	686.4
132.5°	717.1	718.6	721.7	722.4	721.7
135°	751.6	750.8	753.9	755.4	757.0
137.5°	782.3	782.3	786.1	787.6	786.9
140°	812.2	813.7	815.2	817.5	818.3
142.5°	839.0	842.1	842.9	844.4	844.4
145°	866.6	868.9	868.9	869.7	871.2
147.5°	888.1	892.7	891.9	892.7	893.5
150°	911.9	914.9	914.2	914.2	914.9
152.5°	931.8	934.1	932.6	934.1	933.3
155°	950.2	951.0	948.7	951.8	949.5
157.5°	966.3	966.3	963.3	967.1	963.3
160°	980.1	977.8	977.1	981.7	977.1
162.5°	992.4	989.3	988.6	993.2	987.8
165°	1002.4	998.5	998.5	1004.7	997.8
167.5°	1010.8	1007.0	1006.2	1013.1	1005.4
170°	1017.7	1013.1	1013.9	1020.0	1012.3
172.5°	1022.3	1017.7	1018.5	1024.6	1016.2
175°	1025.4	1020.8	1021.5	1028.4	1019.2
177.5°	1027.7	1022.3	1023.8	1030.0	1020.8
180°	1025.4	1025.4	1025.4	1025.4	1025.4

(END OF REPORT)