

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: P1013239

Luminaire Tested: S124RDIP-B1020D590UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013239
REPORT IS A COMBINATION OF REPORTS P998952 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB2750-4F0-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

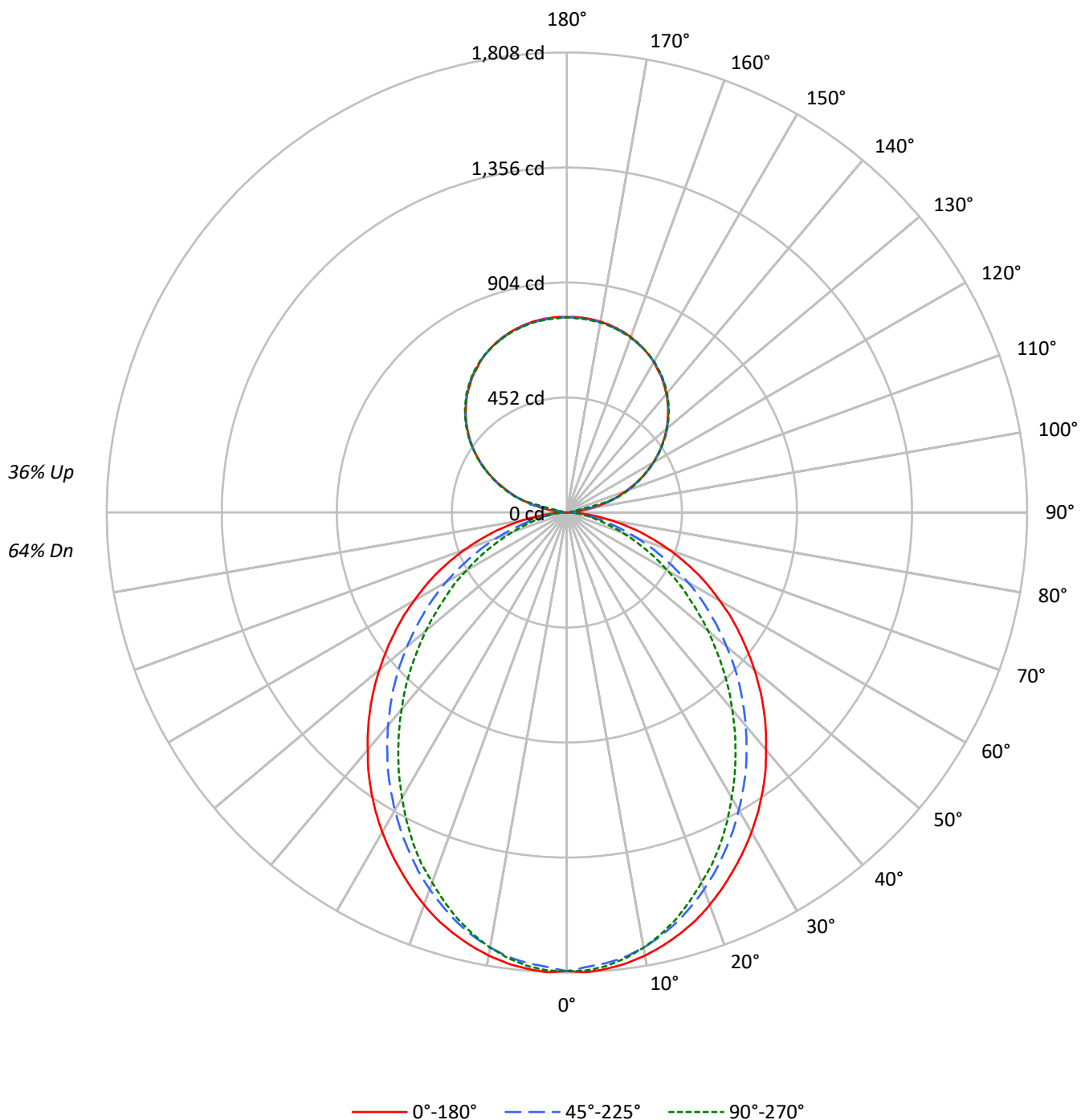
Lumens per Lamp: N/A
Luminaire Lumens: 6542.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	30	10	50	30	10
RCR																				
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64		
1	101	97	93	90	95	91	88	85	80	78	76	70	69	67	61	60	59	54		
2	92	85	79	74	87	80	75	70	71	67	63	62	59	56	54	52	50	46		
3	85	75	68	62	79	71	64	59	63	58	53	55	51	48	48	45	43	39		
4	78	67	59	53	73	63	56	50	56	50	46	50	45	42	44	40	37	34		
5	71	60	52	45	67	56	49	44	50	44	40	45	40	36	39	36	33	30		
6	66	54	46	40	62	51	43	38	46	39	35	41	36	32	36	32	29	26		
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	33	29	26	23		
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21		
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21	19		
10	50	37	30	25	47	36	29	24	32	27	23	29	24	21	26	22	19	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	2.6
10°-20°	472.6	7.2
20°-30°	682.3	10.4
30°-40°	773.3	11.8
40°-50°	746.6	11.4
50°-60°	620.7	9.5
60°-70°	428.4	6.5
70°-80°	216.5	3.3
80°-90°	56.6	0.9
90°-100°	25.5	0.4
100°-110°	167.8	2.6
110°-120°	320.5	4.9
120°-130°	406.8	6.2
130°-140°	435.2	6.7
140°-150°	406.9	6.2
150°-160°	328.2	5.0
160°-170°	211.6	3.2
170°-180°	72.9	1.1
0°-30°	1324.4	20.2
0°-40°	2097.7	32.1
0°-60°	3465.1	53.0
0°-90°	4166.5	63.7
90°-120°	513.8	7.9
90°-150°	1762.7	26.9
90°-180°	2375.0	36.3
0°-180°	6542.0	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	8	13	16	17	6
95°	32	12	13	16	17	39
105°	173	176	179	184	164	181
115°	323	324	324	325	325	318
125°	454	456	455	456	457	405
135°	563	562	564	566	567	434
145°	649	650	650	651	652	405
155°	711	712	710	712	711	328
165°	750	748	748	752	747	212
175°	768	764	765	770	763	73
180°	768	768	768	768	768	

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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°	1.7	8.0	12.6	16.1	17.2
92.5°	8.6	7.5	12.1	15.5	15.5
95°	31.6	12.1	12.6	16.1	16.7
97.5°	60.3	72.9	12.6	15.5	16.1
100°	94.2	104.5	25.3	15.5	16.1
102.5°	132.1	138.9	145.8	16.7	16.7
105°	172.8	176.3	179.1	184.3	163.6
107.5°	210.1	211.9	215.9	218.8	221.1
110°	248.0	249.8	253.2	254.4	256.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.8	288.2	289.4	288.8	291.1
115°	322.7	324.4	323.8	325.0	325.0
117.5°	356.6	358.9	360.6	360.0	360.0
120°	391.0	393.3	392.7	393.9	392.7
122.5°	423.2	424.3	425.5	426.0	424.9
125°	453.6	455.9	454.7	456.5	457.0
127.5°	482.9	483.4	486.3	485.7	485.2
130°	511.0	511.6	513.3	513.9	513.9
132.5°	536.8	538.0	540.3	540.9	540.3
135°	562.7	562.1	564.4	565.6	566.7
137.5°	585.7	585.7	588.5	589.7	589.1
140°	608.0	609.2	610.3	612.1	612.6
142.5°	628.1	630.4	631.0	632.2	632.2
145°	648.8	650.5	650.5	651.1	652.3
147.5°	664.9	668.3	667.8	668.3	668.9
150°	682.7	685.0	684.4	684.4	685.0
152.5°	697.6	699.3	698.2	699.3	698.8
155°	711.4	712.0	710.2	712.5	710.8
157.5°	723.5	723.5	721.2	724.0	721.2
160°	733.8	732.1	731.5	734.9	731.5
162.5°	743.0	740.7	740.1	743.5	739.5
165°	750.4	747.6	747.6	752.2	747.0
167.5°	756.8	753.9	753.3	758.5	752.7
170°	761.9	758.5	759.0	763.6	757.9
172.5°	765.4	761.9	762.5	767.1	760.8
175°	767.7	764.2	764.8	770.0	763.1
177.5°	769.4	765.4	766.5	771.1	764.2
180°	767.7	767.7	767.7	767.7	767.7

(END OF REPORT)