

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: P1013230

Luminaire Tested: S124RDIP-B1020D365UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013230
REPORT IS A COMBINATION OF REPORTS P998912 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D365UB2750-4F0-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

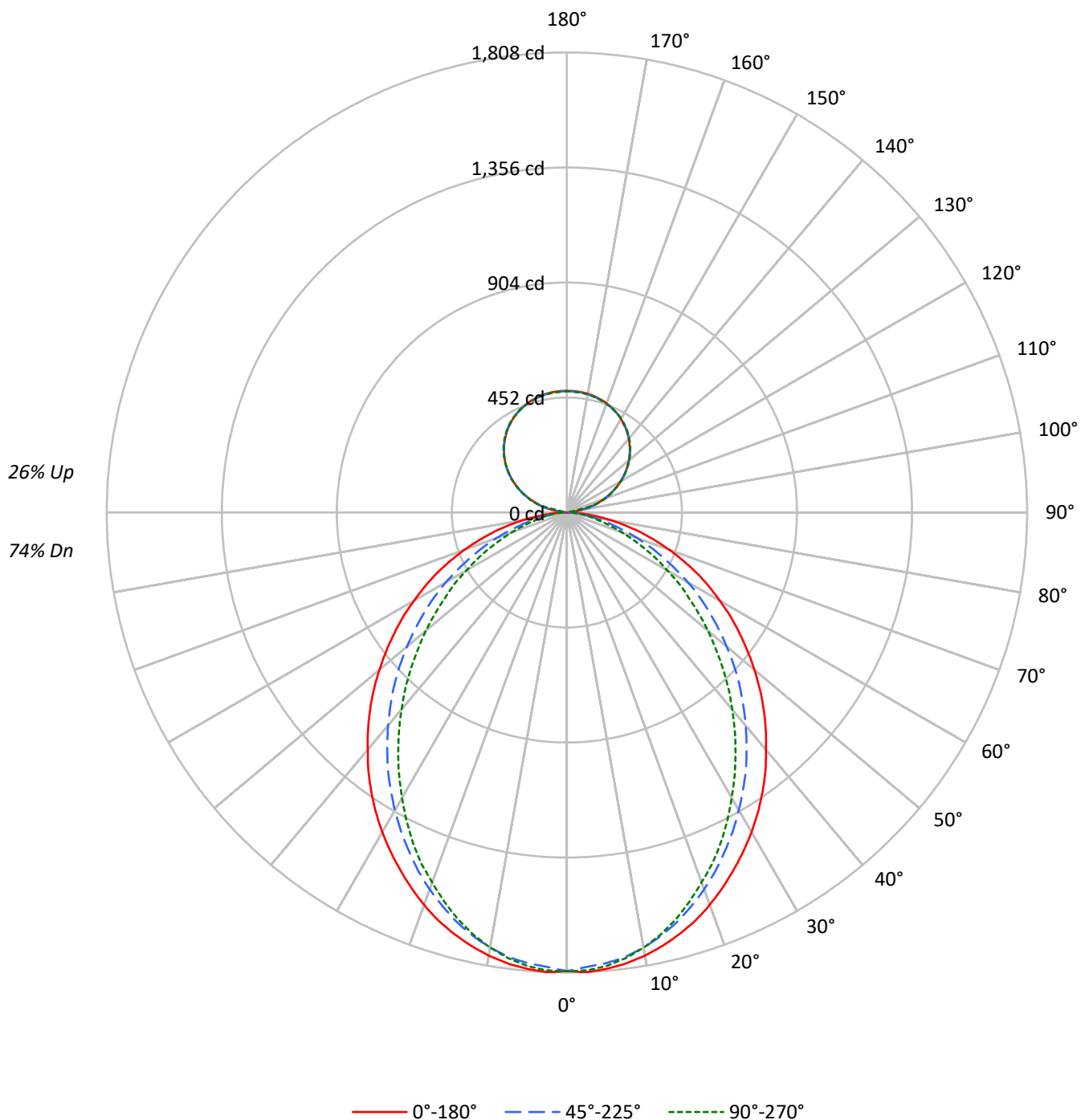
Lumens per Lamp: N/A
Luminaire Lumens: 5643.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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
RCR																	
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78
1	104	99	95	92	98	94	91	88	85	83	80	77	75	73	70	68	67
2	95	87	81	76	90	83	78	73	75	71	67	68	65	62	62	59	57
3	87	77	70	64	82	73	67	61	67	61	57	61	56	53	55	52	49
4	79	68	60	54	75	65	58	52	60	54	49	54	50	46	49	46	42
5	73	61	53	47	69	59	51	45	54	47	43	49	44	40	45	41	37
6	68	55	47	41	64	53	45	40	49	42	38	45	39	35	41	36	33
7	63	50	42	36	60	48	41	35	44	38	33	41	35	31	37	33	29
8	58	46	38	32	55	44	37	32	41	34	30	37	32	28	34	30	27
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	27	24
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22

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	3.0
10°-20°	472.6	8.4
20°-30°	682.3	12.1
30°-40°	773.3	13.7
40°-50°	746.6	13.2
50°-60°	620.7	11.0
60°-70°	428.4	7.6
70°-80°	216.5	3.8
80°-90°	56.0	1.0
90°-100°	15.8	0.3
100°-110°	104.3	1.8
110°-120°	199.2	3.5
120°-130°	252.9	4.5
130°-140°	270.6	4.8
140°-150°	253.0	4.5
150°-160°	204.0	3.6
160°-170°	131.6	2.3
170°-180°	45.4	0.8
0°-30°	1324.4	23.5
0°-40°	2097.7	37.2
0°-60°	3465.1	61.4
0°-90°	4166.0	73.8
90°-120°	319.4	5.7
90°-150°	1096.0	19.4
90°-180°	1477.0	26.2
0°-180°	5643.0	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°	1	5	8	10	11	5
95°	20	8	8	10	10	24
105°	108	110	111	115	102	112
115°	201	202	201	202	202	197
125°	282	284	283	284	284	252
135°	350	350	351	352	352	270
145°	403	404	404	405	406	252
155°	442	443	442	443	442	204
165°	467	465	465	468	464	132
175°	477	475	476	479	474	45
180°	477	477	477	477	477	



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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°	1.1	5.0	7.9	10.0	10.7
92.5°	5.4	4.6	7.5	9.6	9.6
95°	19.6	7.5	7.9	10.0	10.4
97.5°	37.5	45.3	7.9	9.6	10.0
100°	58.6	65.0	15.7	9.6	10.0
102.5°	82.1	86.4	90.7	10.4	10.4
105°	107.5	109.6	111.4	114.6	101.7
107.5°	130.7	131.7	134.2	136.0	137.4
110°	154.2	155.3	157.4	158.2	159.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.1	179.2	179.9	179.6	181.0
115°	200.6	201.7	201.4	202.1	202.1
117.5°	221.7	223.1	224.2	223.8	223.8
120°	243.1	244.6	244.2	244.9	244.2
122.5°	263.1	263.8	264.5	264.9	264.2
125°	282.0	283.5	282.8	283.8	284.2
127.5°	300.2	300.6	302.4	302.0	301.7
130°	317.7	318.1	319.2	319.5	319.5
132.5°	333.8	334.5	335.9	336.3	335.9
135°	349.9	349.5	350.9	351.7	352.4
137.5°	364.2	364.2	365.9	366.7	366.3
140°	378.1	378.8	379.5	380.6	380.9
142.5°	390.6	392.0	392.4	393.1	393.1
145°	403.4	404.5	404.5	404.9	405.6
147.5°	413.4	415.6	415.2	415.6	415.9
150°	424.5	425.9	425.6	425.6	425.9
152.5°	433.8	434.8	434.1	434.8	434.5
155°	442.3	442.7	441.6	443.1	442.0
157.5°	449.8	449.8	448.4	450.2	448.4
160°	456.3	455.2	454.8	457.0	454.8
162.5°	462.0	460.5	460.2	462.3	459.8
165°	466.6	464.8	464.8	467.7	464.5
167.5°	470.5	468.8	468.4	471.6	468.0
170°	473.8	471.6	472.0	474.8	471.3
172.5°	475.9	473.8	474.1	477.0	473.0
175°	477.3	475.2	475.5	478.8	474.5
177.5°	478.4	475.9	476.6	479.5	475.2
180°	477.3	477.3	477.3	477.3	477.3

(END OF REPORT)