

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: P1026036

Luminaire Tested: S124RDIP-B1020D590UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026036
REPORT IS A COMBINATION OF REPORTS P998966 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB35-4F0-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

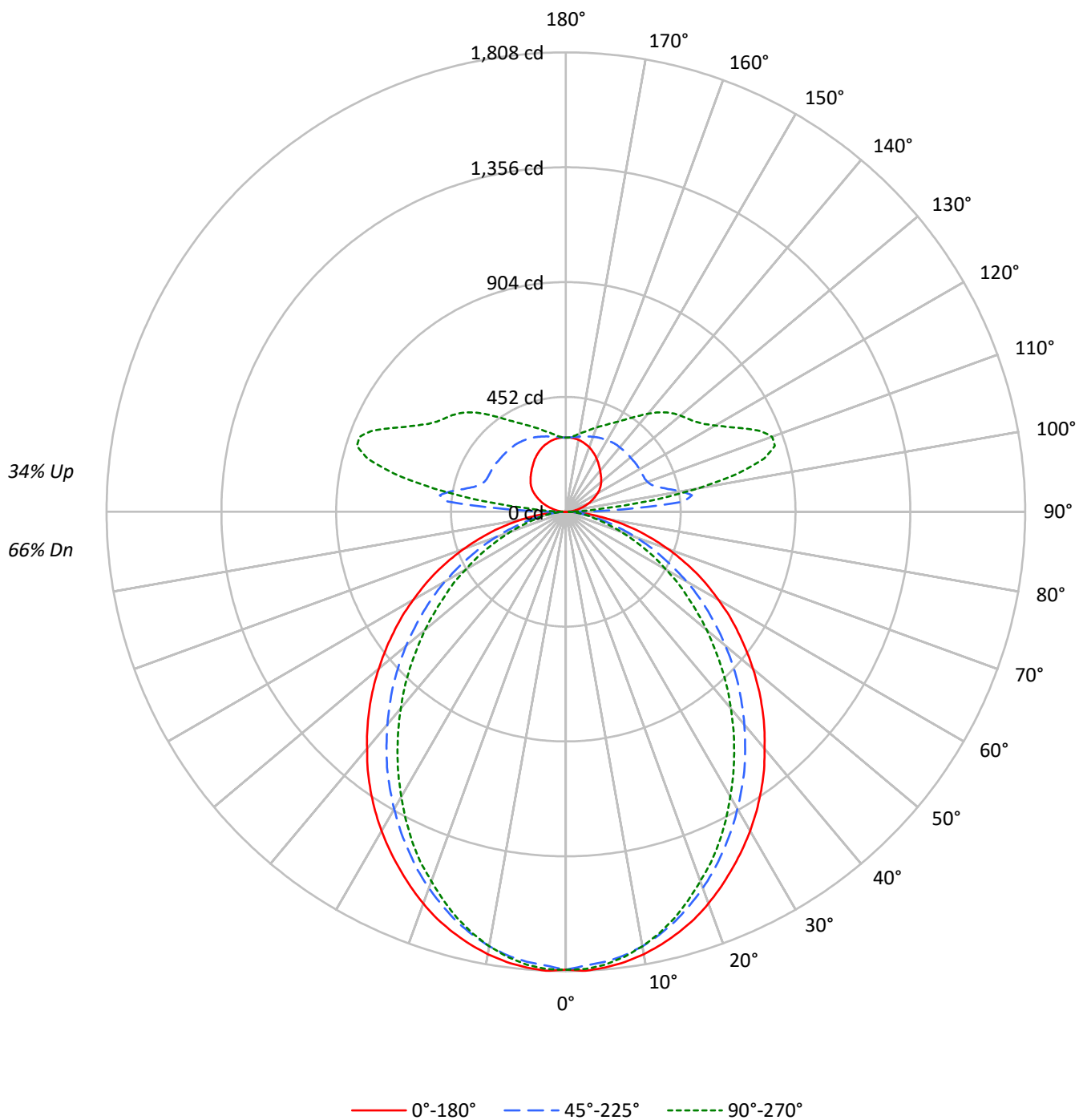
Lumens per Lamp: N/A
Luminaire Lumens: 6298.3 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
RCR																	
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	102	97	94	90	96	92	89	86	82	79	77	72	70	68	63	62	61
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52
3	85	76	68	62	80	71	65	60	64	59	54	57	53	49	50	47	44
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	41	38
5	72	60	52	46	67	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	51	44	39	46	40	36	41	37	33	37	33	30
7	61	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	31	54	43	35	30	39	33	28	35	30	26	31	27	24
9	53	41	33	28	50	39	32	27	35	30	25	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	21	27	23	20

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	2.7
10°-20°	472.6	7.5
20°-30°	682.3	10.8
30°-40°	773.3	12.3
40°-50°	746.6	11.9
50°-60°	620.7	9.9
60°-70°	428.4	6.8
70°-80°	216.5	3.4
80°-90°	56.1	0.9
90°-100°	217.0	3.4
100°-110°	441.4	7.0
110°-120°	393.4	6.2
120°-130°	330.5	5.2
130°-140°	275.8	4.4
140°-150°	210.6	3.3
150°-160°	148.0	2.4
160°-170°	87.1	1.4
170°-180°	28.3	0.4
0°-30°	1324.4	21.0
0°-40°	2097.7	33.3
0°-60°	3465.1	55.0
0°-90°	4166.1	66.1
90°-120°	1051.9	16.7
90°-150°	1868.7	29.7
90°-180°	2132.0	33.9
0°-180°	6298.3	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	10	12	12	6
95°	19	60	468	232	140	21
105°	67	97	376	811	808	72
115°	118	148	336	645	775	117
125°	165	196	334	549	619	147
135°	196	233	331	487	553	151
145°	226	258	330	411	452	142
155°	257	277	320	363	378	118
165°	280	288	307	325	330	79
175°	292	292	294	298	297	28
180°	292	292	292	292	292	

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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°	0.6	4.6	10.3	11.5	12.1
92.5°	8.0	44.2	225.0	74.4	52.2
95°	18.9	59.6	467.8	231.6	140.1
97.5°	31.6	66.0	500.5	473.0	336.4
100°	43.6	74.6	461.5	654.4	526.3
102.5°	55.1	84.9	412.7	768.0	691.6
105°	67.2	97.3	376.5	810.8	807.6
107.5°	80.4	109.9	353.0	797.8	862.7
110°	93.6	122.6	342.1	751.9	863.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	135.2	336.9	695.7	830.0
115°	118.2	148.4	335.8	645.2	775.4
117.5°	130.9	160.8	335.2	605.6	722.1
120°	143.5	172.8	335.2	578.8	678.4
122.5°	155.0	184.6	334.6	561.4	644.0
125°	164.7	195.8	334.1	549.0	618.8
127.5°	173.9	206.0	332.9	537.2	602.7
130°	181.4	216.1	332.3	523.2	588.9
132.5°	188.8	224.8	331.8	506.5	573.4
135°	195.7	233.0	331.2	487.4	553.3
137.5°	202.6	240.2	331.2	466.6	529.8
140°	210.1	246.8	330.6	446.6	504.0
142.5°	218.1	252.8	330.6	427.9	476.4
145°	225.6	258.3	329.5	411.0	451.7
147.5°	234.2	263.4	327.7	396.9	428.8
150°	242.2	268.4	326.0	384.0	409.8
152.5°	249.7	272.9	323.2	373.1	392.6
155°	256.6	277.0	320.3	362.8	378.3
157.5°	263.5	280.6	317.4	353.0	365.1
160°	269.8	283.8	314.0	343.2	353.0
162.5°	275.5	286.4	310.5	333.8	341.5
165°	279.5	288.2	307.1	325.2	330.0
167.5°	284.1	289.6	303.6	317.7	320.9
170°	287.0	290.8	300.2	310.2	312.2
172.5°	289.9	291.6	296.7	303.6	303.6
175°	291.6	292.2	294.5	298.5	297.3
177.5°	292.7	292.2	292.7	294.8	292.7
180°	292.2	292.2	292.2	292.2	292.2

(END OF REPORT)