

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: P1026040

Luminaire Tested: S124RDIP-B1020D590UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026040
REPORT IS A COMBINATION OF REPORTS P998970 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB40-4F0-XX-W2A-F
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

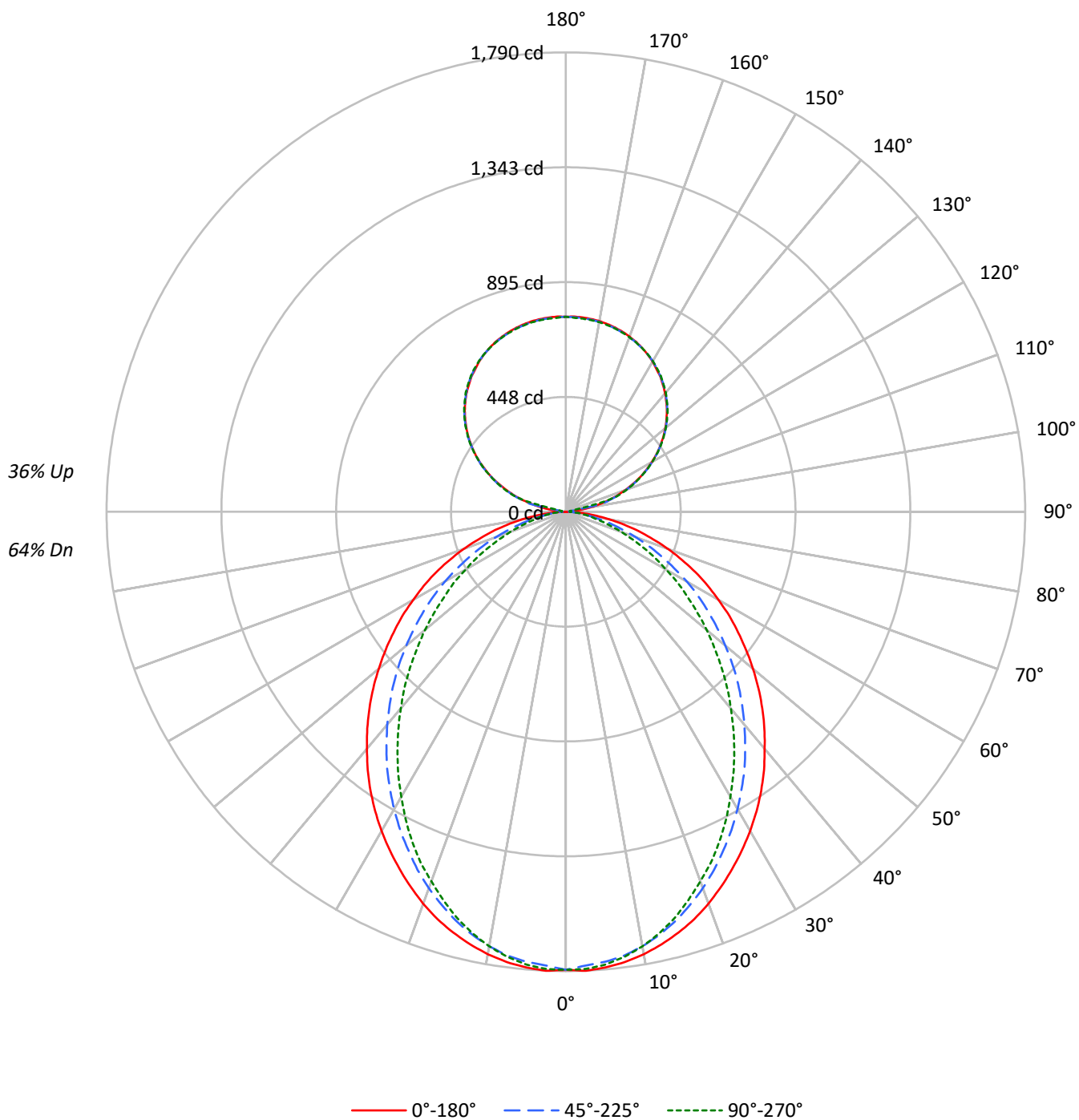
Lumens per Lamp: N/A
Luminaire Lumens: 6477.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14554	14554	14554
5°	14556	14122	14123
10°	14432	13676	13513
15°	14233	13122	12794
20°	13973	12489	11974
25°	13649	11806	11172
30°	13332	11110	10273
35°	12983	10404	9394
40°	12568	9645	8490
45°	12178	8891	7595
50°	11734	8068	6687
55°	11256	7225	5749
60°	10724	6328	4824
65°	10212	5301	3932
70°	9482	4219	3005
75°	8547	3070	2101
80°	7140	1884	1511
85°	5370	1086	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.8	2.6
10°-20°	467.9	7.2
20°-30°	675.6	10.4
30°-40°	765.7	11.8
40°-50°	739.3	11.4
50°-60°	614.6	9.5
60°-70°	424.2	6.5
70°-80°	214.4	3.3
80°-90°	56.0	0.9
90°-100°	25.2	0.4
100°-110°	166.1	2.6
110°-120°	317.2	4.9
120°-130°	402.7	6.2
130°-140°	430.8	6.7
140°-150°	402.8	6.2
150°-160°	324.8	5.0
160°-170°	209.5	3.2
170°-180°	72.2	1.1
0°-30°	1311.4	20.2
0°-40°	2077.1	32.1
0°-60°	3431.0	53.0
0°-90°	4125.6	63.7
90°-120°	508.5	7.9
90°-150°	1744.9	26.9
90°-180°	2351.0	36.3
0°-180°	6477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1782	1777	1760	1774	1771	169
15°	1697	1685	1651	1648	1639	478
25°	1535	1510	1454	1431	1417	707
35°	1327	1283	1215	1168	1144	829
45°	1082	1032	950	883	858	835
55°	820	765	676	605	579	734
65°	558	499	411	353	336	551
75°	297	246	182	150	142	313
85°	74	46	42	40	40	81
90°	2	8	12	16	17	6
95°	31	12	12	16	16	39
105°	171	174	177	182	162	179
115°	319	321	321	322	322	314
125°	449	451	450	452	452	401
135°	557	556	559	560	561	429
145°	642	644	644	644	646	401
155°	704	705	703	705	704	325
165°	743	740	740	745	739	210
175°	760	756	757	762	755	72
180°	760	760	760	760	760	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.8	1784.8	1784.8	1784.8	1784.8
2.5°	1790.3	1784.8	1769.8	1784.8	1783.4
5°	1782.1	1776.6	1760.2	1773.9	1771.1
7.5°	1769.8	1764.3	1743.8	1753.4	1749.3
10°	1750.6	1743.8	1719.2	1724.7	1719.2
12.5°	1726.0	1717.8	1687.8	1690.5	1682.3
15°	1697.3	1685.0	1650.9	1648.2	1638.6
17.5°	1664.5	1646.8	1607.2	1600.3	1586.7
20°	1624.9	1607.2	1560.7	1549.8	1532.0
22.5°	1581.2	1560.7	1510.1	1492.4	1478.7
25°	1534.7	1510.1	1454.1	1430.9	1417.2
27.5°	1486.9	1456.8	1398.1	1370.7	1351.6
30°	1436.3	1402.2	1337.9	1303.8	1281.9
32.5°	1383.0	1343.4	1276.4	1235.4	1214.9
35°	1327.0	1283.3	1214.9	1168.5	1143.9
37.5°	1268.2	1223.1	1148.0	1097.4	1072.8
40°	1205.4	1160.3	1082.4	1025.0	1000.4
42.5°	1145.2	1097.4	1015.4	956.6	930.7
45°	1082.4	1031.8	949.8	882.8	858.2
47.5°	1018.1	966.2	881.5	811.8	784.4
50°	952.5	899.2	811.8	743.4	717.5
52.5°	885.6	833.6	743.4	673.7	646.4
55°	820.0	765.3	676.5	605.4	579.4
57.5°	755.7	698.3	610.9	538.5	519.3
60°	686.0	631.4	543.9	472.9	451.0
62.5°	623.2	565.8	475.6	411.4	395.0
65°	557.6	498.8	411.4	352.6	336.2
67.5°	489.3	433.2	351.2	299.3	280.2
70°	425.0	367.6	289.7	244.6	231.0
72.5°	356.7	306.1	233.7	196.8	184.5
75°	296.6	246.0	181.8	150.3	142.1
77.5°	233.7	190.0	135.3	113.4	110.7
80°	173.6	133.9	92.9	88.8	87.5
82.5°	121.6	86.1	67.0	64.2	62.9
85°	73.8	46.5	42.4	39.6	39.6
87.5°	31.4	20.5	19.1	17.8	19.1
90°	1.7	8.0	12.5	15.9	17.1
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.3	11.9	12.5	15.9	16.5
97.5°	59.7	72.2	12.5	15.3	15.9
100°	93.2	103.4	25.0	15.3	15.9
102.5°	130.7	137.5	144.4	16.5	16.5
105°	171.1	174.5	177.3	182.4	162.0
107.5°	208.0	209.7	213.7	216.5	218.8
110°	245.5	247.2	250.7	251.8	253.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	285.3	286.5	285.9	288.2
115°	319.4	321.1	320.6	321.7	321.7
117.5°	353.0	355.2	356.9	356.4	356.4
120°	387.1	389.3	388.8	389.9	388.8
122.5°	418.9	420.0	421.2	421.7	420.6
125°	449.0	451.3	450.1	451.9	452.4
127.5°	478.0	478.6	481.4	480.8	480.3
130°	505.8	506.4	508.1	508.7	508.7
132.5°	531.4	532.6	534.8	535.4	534.8
135°	557.0	556.4	558.7	559.8	561.0
137.5°	579.7	579.7	582.6	583.7	583.1
140°	601.9	603.0	604.2	605.9	606.5
142.5°	621.8	624.1	624.6	625.8	625.8
145°	642.3	644.0	644.0	644.5	645.7
147.5°	658.2	661.6	661.0	661.6	662.2
150°	675.8	678.1	677.5	677.5	678.1
152.5°	690.6	692.3	691.1	692.3	691.7
155°	704.2	704.8	703.1	705.3	703.6
157.5°	716.1	716.1	713.9	716.7	713.9
160°	726.4	724.7	724.1	727.5	724.1
162.5°	735.5	733.2	732.6	736.0	732.1
165°	742.9	740.0	740.0	744.6	739.4
167.5°	749.1	746.3	745.7	750.8	745.1
170°	754.2	750.8	751.4	755.9	750.2
172.5°	757.6	754.2	754.8	759.3	753.1
175°	759.9	756.5	757.1	762.2	755.4
177.5°	761.6	757.6	758.8	763.3	756.5
180°	759.9	759.9	759.9	759.9	759.9

(END OF REPORT)