

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: P1026041

Luminaire Tested: S124RDIP-B1020D590UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026041
REPORT IS A COMBINATION OF REPORTS P998971 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-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

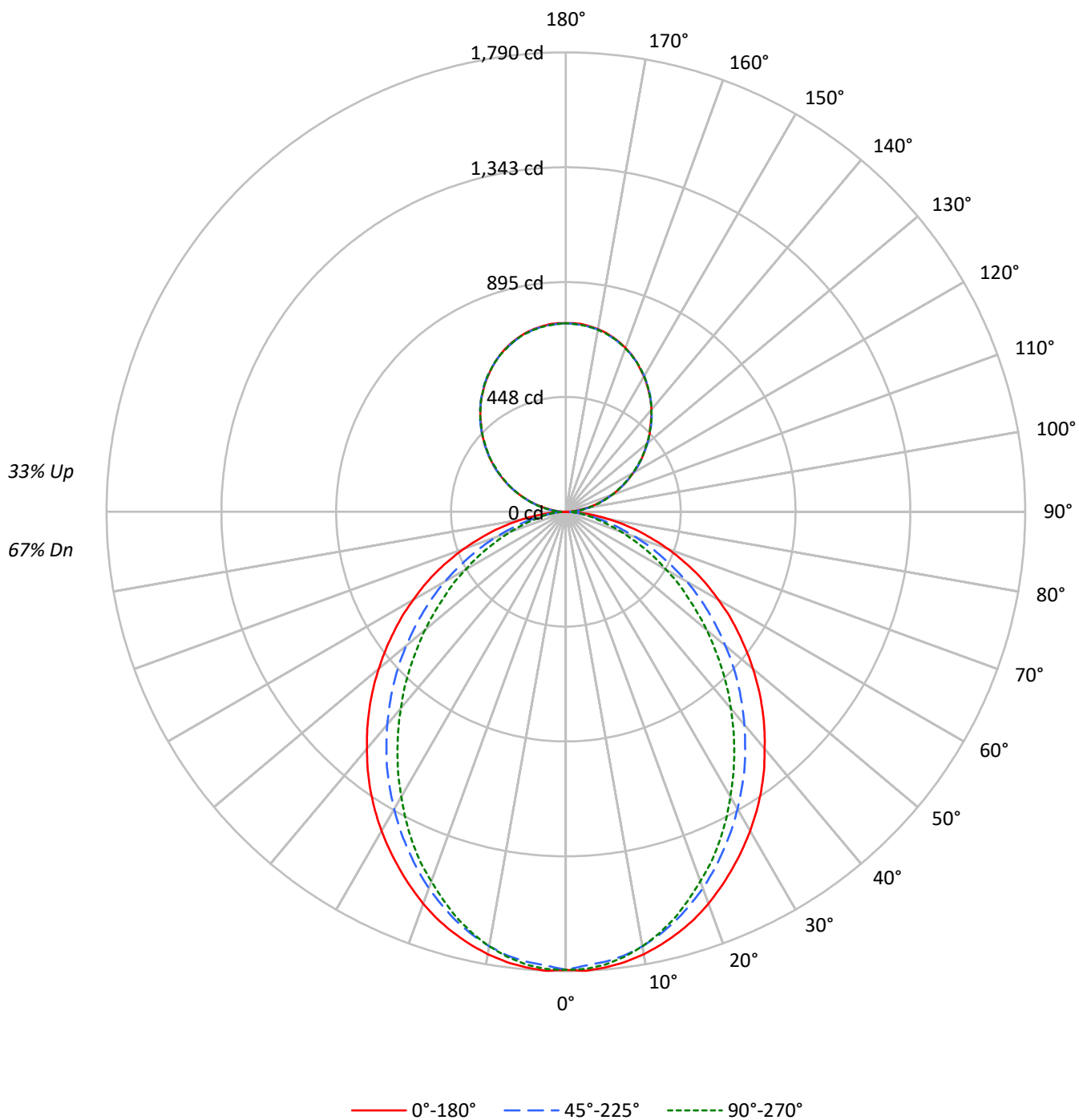
Lumens per Lamp: N/A
Luminaire Lumens: 6164.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	98	94	90	96	92	89	86	82	79	77	73	71	69	64	63	61
2	93	86	80	74	88	81	76	71	72	68	64	64	61	58	57	54	52
3	85	76	68	62	80	72	65	60	64	59	55	57	53	50	51	47	45
4	78	67	59	53	73	64	57	51	57	51	47	51	47	43	45	42	39
5	72	60	52	46	68	57	50	44	51	45	41	46	41	37	41	37	34
6	66	54	46	40	62	52	44	39	47	40	36	42	37	33	37	33	30
7	62	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27
8	57	45	37	32	54	43	36	30	39	33	28	35	30	26	32	27	24
9	53	41	33	28	50	39	32	27	36	30	26	32	27	24	29	25	22
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20

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	2.7
10°-20°	467.9	7.6
20°-30°	675.6	11.0
30°-40°	765.7	12.4
40°-50°	739.3	12.0
50°-60°	614.6	10.0
60°-70°	424.2	6.9
70°-80°	214.4	3.5
80°-90°	56.0	0.9
90°-100°	47.9	0.8
100°-110°	143.4	2.3
110°-120°	243.7	4.0
120°-130°	321.4	5.2
130°-140°	360.9	5.9
140°-150°	354.8	5.8
150°-160°	298.4	4.8
160°-170°	198.5	3.2
170°-180°	69.5	1.1
0°-30°	1311.4	21.3
0°-40°	2077.1	33.7
0°-60°	3431.0	55.7
0°-90°	4125.6	66.9
90°-120°	435.0	7.1
90°-150°	1472.0	23.9
90°-180°	2038.0	33.1
0°-180°	6164.0	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	7
95°	34	39	43	45	45	37
105°	132	133	135	137	139	140
115°	248	248	247	246	246	244
125°	361	361	360	359	358	322
135°	465	469	469	468	466	360
145°	565	568	568	568	566	354
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

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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	17.0
92.5°	14.8	22.2	25.0	26.7	27.3
95°	34.1	39.2	43.2	44.9	44.9
97.5°	54.5	59.1	63.6	65.9	65.9
100°	79.5	81.8	86.9	88.1	88.1
102.5°	105.7	106.3	110.8	112.5	113.1
105°	132.4	133.0	135.2	136.9	138.6
107.5°	160.2	160.8	161.4	163.6	163.1
110°	188.6	189.8	189.2	188.1	189.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	218.2	217.0	217.0	217.0
115°	247.7	247.7	246.6	246.0	245.5
117.5°	275.6	275.6	275.0	273.3	271.6
120°	303.4	305.7	304.0	301.1	302.3
122.5°	332.4	333.0	332.4	330.7	327.8
125°	360.8	360.8	360.2	359.1	358.0
127.5°	386.4	388.1	386.9	385.8	385.2
130°	413.6	415.3	415.3	414.2	411.9
132.5°	441.5	442.6	442.0	440.9	440.3
135°	465.3	468.8	468.8	467.6	465.9
137.5°	492.1	493.8	494.9	493.2	493.8
140°	518.8	519.9	519.9	519.3	518.8
142.5°	543.2	544.3	543.8	543.8	543.8
145°	565.3	567.6	568.2	567.6	565.9
147.5°	588.1	590.9	590.3	589.8	589.2
150°	608.5	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)