

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: P1026048

Luminaire Tested: S124RDIP-B1020D590UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026048
REPORT IS A COMBINATION OF REPORTS P998978 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D590UB50-4F0-XX-W2A-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

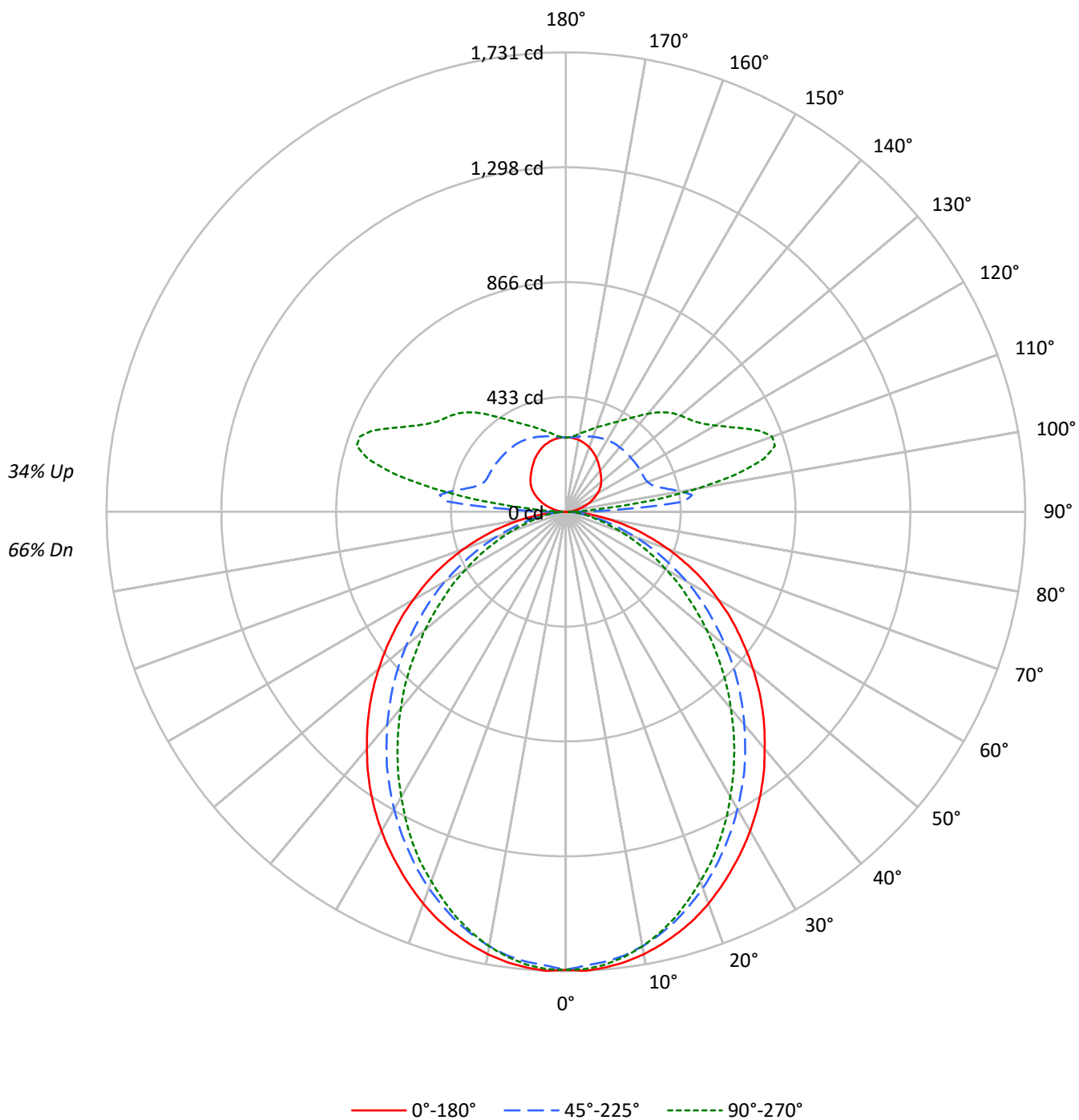
Lumens per Lamp: N/A
Luminaire Lumens: 6031.1 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	14075	14075	14075
5°	14076	13656	13657
10°	13956	13225	13068
15°	13765	12688	12372
20°	13513	12077	11579
25°	13199	11417	10804
30°	12893	10744	9934
35°	12554	10062	9084
40°	12153	9327	8210
45°	11776	8598	7345
50°	11347	7802	6466
55°	10884	6986	5560
60°	10370	6120	4664
65°	9875	5126	3802
70°	9169	4080	2905
75°	8265	2969	2032
80°	6901	1823	1461
85°	5196	1051	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.7
10°-20°	452.5	7.5
20°-30°	653.3	10.8
30°-40°	740.4	12.3
40°-50°	714.9	11.9
50°-60°	594.3	9.9
60°-70°	410.2	6.8
70°-80°	207.3	3.4
80°-90°	53.7	0.9
90°-100°	207.8	3.4
100°-110°	422.7	7.0
110°-120°	376.8	6.2
120°-130°	316.5	5.2
130°-140°	264.1	4.4
140°-150°	201.7	3.3
150°-160°	141.8	2.4
160°-170°	83.4	1.4
170°-180°	27.1	0.4
0°-30°	1268.1	21.0
0°-40°	2008.6	33.3
0°-60°	3317.8	55.0
0°-90°	3989.1	66.1
90°-120°	1007.4	16.7
90°-150°	1789.7	29.7
90°-180°	2042.0	33.9
0°-180°	6031.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1723	1718	1702	1715	1713	164
15°	1641	1630	1596	1594	1584	463
25°	1484	1460	1406	1384	1370	684
35°	1283	1241	1175	1130	1106	802
45°	1047	998	918	854	830	807
55°	793	740	654	585	560	709
65°	539	482	398	341	325	532
75°	287	238	176	145	137	302
85°	71	45	41	38	38	78
90°	0	4	10	11	12	5
95°	18	57	448	222	134	20
105°	64	93	361	776	774	69
115°	113	142	322	618	743	112
125°	158	187	320	526	593	141
135°	188	223	317	467	530	145
145°	216	247	316	394	433	136
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.0	1726.0	1726.0	1726.0	1726.0
2.5°	1731.2	1726.0	1711.4	1726.0	1724.6
5°	1723.3	1718.0	1702.2	1715.4	1712.7
7.5°	1711.4	1706.1	1686.3	1695.6	1691.6
10°	1692.9	1686.3	1662.5	1667.8	1662.5
12.5°	1669.1	1661.2	1632.1	1634.8	1626.8
15°	1641.4	1629.5	1596.4	1593.8	1584.5
17.5°	1609.7	1592.5	1554.2	1547.5	1534.3
20°	1571.3	1554.2	1509.2	1498.6	1481.5
22.5°	1529.0	1509.2	1460.3	1443.1	1429.9
25°	1484.1	1460.3	1406.1	1383.7	1370.5
27.5°	1437.9	1408.8	1352.0	1325.5	1307.0
30°	1389.0	1355.9	1293.8	1260.8	1239.6
32.5°	1337.4	1299.1	1234.3	1194.7	1174.9
35°	1283.2	1240.9	1174.9	1129.9	1106.1
37.5°	1226.4	1182.8	1110.1	1061.2	1037.4
40°	1165.6	1122.0	1046.7	991.2	967.4
42.5°	1107.5	1061.2	981.9	925.1	900.0
45°	1046.7	997.8	918.5	853.7	829.9
47.5°	984.6	934.3	852.4	785.0	758.6
50°	921.1	869.6	785.0	718.9	693.8
52.5°	856.4	806.2	718.9	651.5	625.1
55°	792.9	740.1	654.2	585.4	560.3
57.5°	730.8	675.3	590.7	520.7	502.2
60°	663.4	610.6	526.0	457.3	436.1
62.5°	602.6	547.1	459.9	397.8	381.9
65°	539.2	482.4	397.8	341.0	325.1
67.5°	473.1	418.9	339.6	289.4	270.9
70°	411.0	355.5	280.2	236.6	223.3
72.5°	344.9	296.0	226.0	190.3	178.4
75°	286.8	237.9	175.8	145.4	137.4
77.5°	226.0	183.7	130.8	109.7	107.0
80°	167.8	129.5	89.9	85.9	84.6
82.5°	117.6	83.3	64.8	62.1	60.8
85°	71.4	44.9	41.0	38.3	38.3
87.5°	30.4	19.8	18.5	17.2	18.5
90°	0.5	4.4	9.9	11.0	11.5
92.5°	7.7	42.4	215.5	71.2	50.0
95°	18.1	57.2	448.0	221.8	134.1
97.5°	30.2	63.2	479.4	453.0	322.1
100°	41.8	71.5	442.0	626.6	504.1
102.5°	52.8	81.4	395.2	735.5	662.4
105°	64.3	93.2	360.6	776.4	773.5
107.5°	77.0	105.2	338.1	764.1	826.2
110°	89.6	117.4	327.6	720.2	827.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.7	129.4	322.7	666.2	794.9
115°	113.2	142.1	321.6	617.9	742.7
117.5°	125.3	153.9	321.0	580.0	691.5
120°	137.4	165.5	321.0	554.4	649.8
122.5°	148.4	176.8	320.5	537.6	616.8
125°	157.8	187.4	319.9	525.8	592.6
127.5°	166.6	197.4	318.8	514.5	577.2
130°	173.7	207.0	318.3	501.0	564.0
132.5°	180.9	215.2	317.7	485.2	549.2
135°	187.5	223.2	317.2	466.8	529.9
137.5°	194.1	230.0	317.2	447.0	507.4
140°	201.2	236.4	316.6	427.6	482.7
142.5°	208.9	242.2	316.6	409.8	456.3
145°	216.0	247.4	315.5	393.6	432.6
147.5°	224.3	252.3	313.9	380.2	410.6
150°	232.0	257.0	312.2	367.8	392.5
152.5°	239.1	261.4	309.5	357.4	376.0
155°	245.7	265.2	306.7	347.4	362.3
157.5°	252.3	268.8	304.0	338.0	349.6
160°	258.4	271.8	300.7	328.7	338.1
162.5°	263.9	274.3	297.4	319.6	327.1
165°	267.7	276.0	294.1	311.4	316.1
167.5°	272.1	277.4	290.8	304.2	307.3
170°	274.9	278.5	287.5	297.1	299.0
172.5°	277.6	279.2	284.2	290.8	290.8
175°	279.3	279.8	282.0	285.9	284.8
177.5°	280.4	279.8	280.4	282.3	280.4
180°	279.8	279.8	279.8	279.8	279.8

(END OF REPORT)