

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: P1026046

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026046
REPORT IS A COMBINATION OF REPORTS P998976 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-F
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

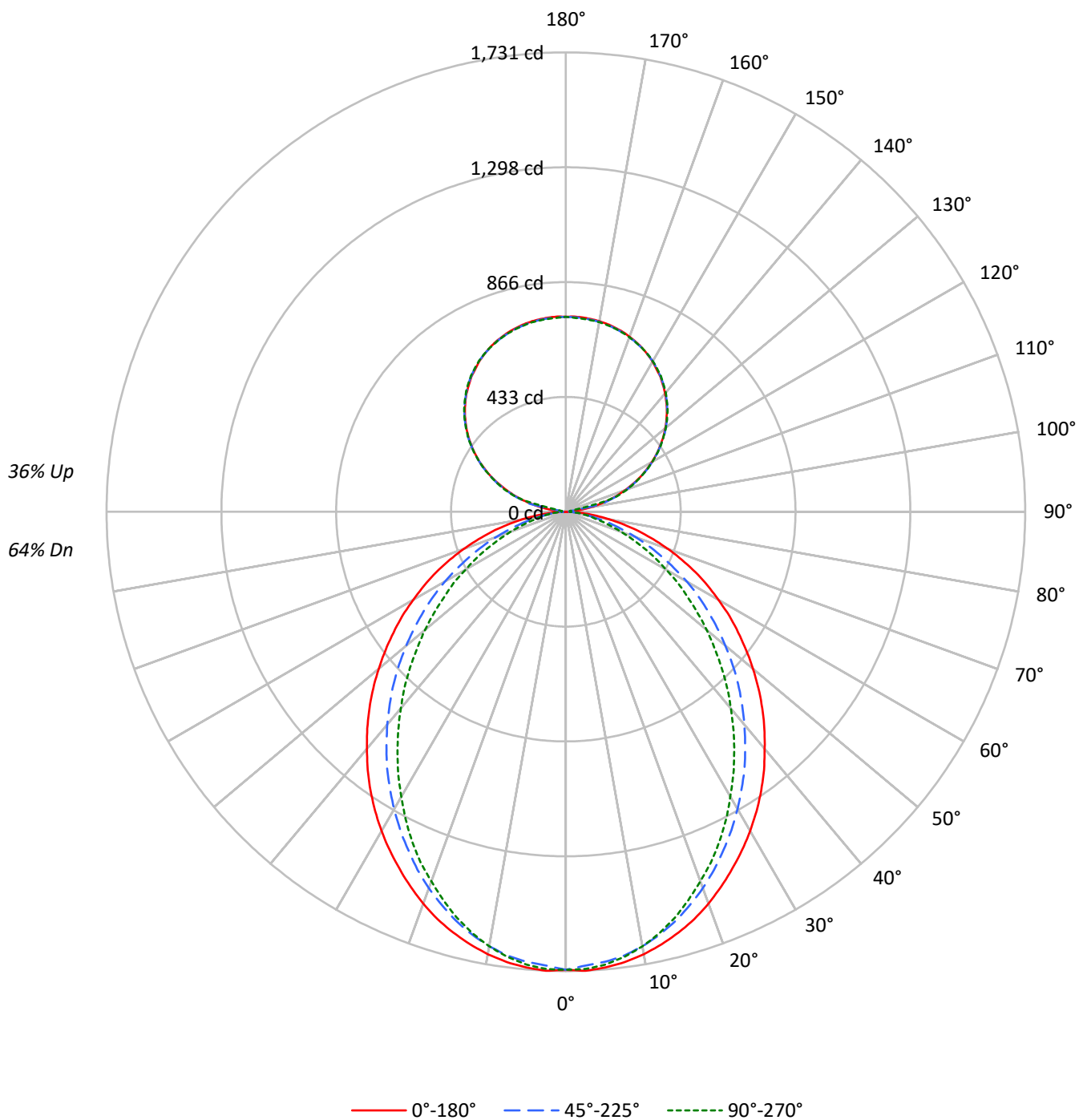
Lumens per Lamp: N/A
Luminaire Lumens: 6263.0 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	2.6
10°-20°	452.5	7.2
20°-30°	653.3	10.4
30°-40°	740.4	11.8
40°-50°	714.9	11.4
50°-60°	594.3	9.5
60°-70°	410.2	6.6
70°-80°	207.3	3.3
80°-90°	54.2	0.9
90°-100°	24.4	0.4
100°-110°	160.6	2.6
110°-120°	306.7	4.9
120°-130°	389.4	6.2
130°-140°	416.5	6.7
140°-150°	389.5	6.2
150°-160°	314.1	5.0
160°-170°	202.6	3.2
170°-180°	69.8	1.1
0°-30°	1268.1	20.2
0°-40°	2008.6	32.1
0°-60°	3317.8	53.0
0°-90°	3989.5	63.7
90°-120°	491.7	7.9
90°-150°	1687.0	26.9
90°-180°	2273.0	36.3
0°-180°	6263.0	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°	2	8	12	15	16	6
95°	30	12	12	15	16	37
105°	165	169	172	176	157	173
115°	309	310	310	311	311	304
125°	434	436	435	437	437	388
135°	538	538	540	541	542	415
145°	621	623	623	623	624	388
155°	681	681	680	682	680	314
165°	718	716	716	720	715	203
175°	735	731	732	737	730	70
180°	735	735	735	735	735	

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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°	1.6	7.7	12.1	15.4	16.5
92.5°	8.2	7.1	11.5	14.8	14.8
95°	30.2	11.5	12.1	15.4	15.9
97.5°	57.7	69.8	12.1	14.8	15.4
100°	90.1	100.0	24.2	14.8	15.4
102.5°	126.4	133.0	139.6	15.9	15.9
105°	165.4	168.7	171.5	176.4	156.6
107.5°	201.1	202.8	206.6	209.4	211.6
110°	237.4	239.0	242.3	243.4	245.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.6	275.9	277.0	276.4	278.6
115°	308.8	310.5	309.9	311.0	311.0
117.5°	341.3	343.5	345.1	344.6	344.6
120°	374.2	376.4	375.9	377.0	375.9
122.5°	405.0	406.1	407.2	407.8	406.7
125°	434.1	436.3	435.2	436.9	437.4
127.5°	462.2	462.7	465.5	464.9	464.4
130°	489.1	489.6	491.3	491.8	491.8
132.5°	513.8	514.9	517.1	517.7	517.1
135°	538.5	538.0	540.2	541.3	542.4
137.5°	560.5	560.5	563.3	564.4	563.8
140°	582.0	583.1	584.1	585.8	586.3
142.5°	601.2	603.4	603.9	605.0	605.0
145°	621.0	622.6	622.6	623.2	624.3
147.5°	636.4	639.7	639.1	639.7	640.2
150°	653.4	655.6	655.0	655.0	655.6
152.5°	667.7	669.3	668.2	669.3	668.8
155°	680.9	681.4	679.8	682.0	680.3
157.5°	692.4	692.4	690.2	693.0	690.2
160°	702.3	700.6	700.1	703.4	700.1
162.5°	711.1	708.9	708.3	711.6	707.8
165°	718.2	715.5	715.5	719.9	714.9
167.5°	724.3	721.5	721.0	725.9	720.4
170°	729.2	725.9	726.5	730.9	725.4
172.5°	732.5	729.2	729.8	734.2	728.1
175°	734.7	731.4	732.0	736.9	730.3
177.5°	736.4	732.5	733.6	738.0	731.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)