

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: P1026077

Luminaire Tested: S124RDIP-B1020D810UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026077
REPORT IS A COMBINATION OF REPORTS P999017 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

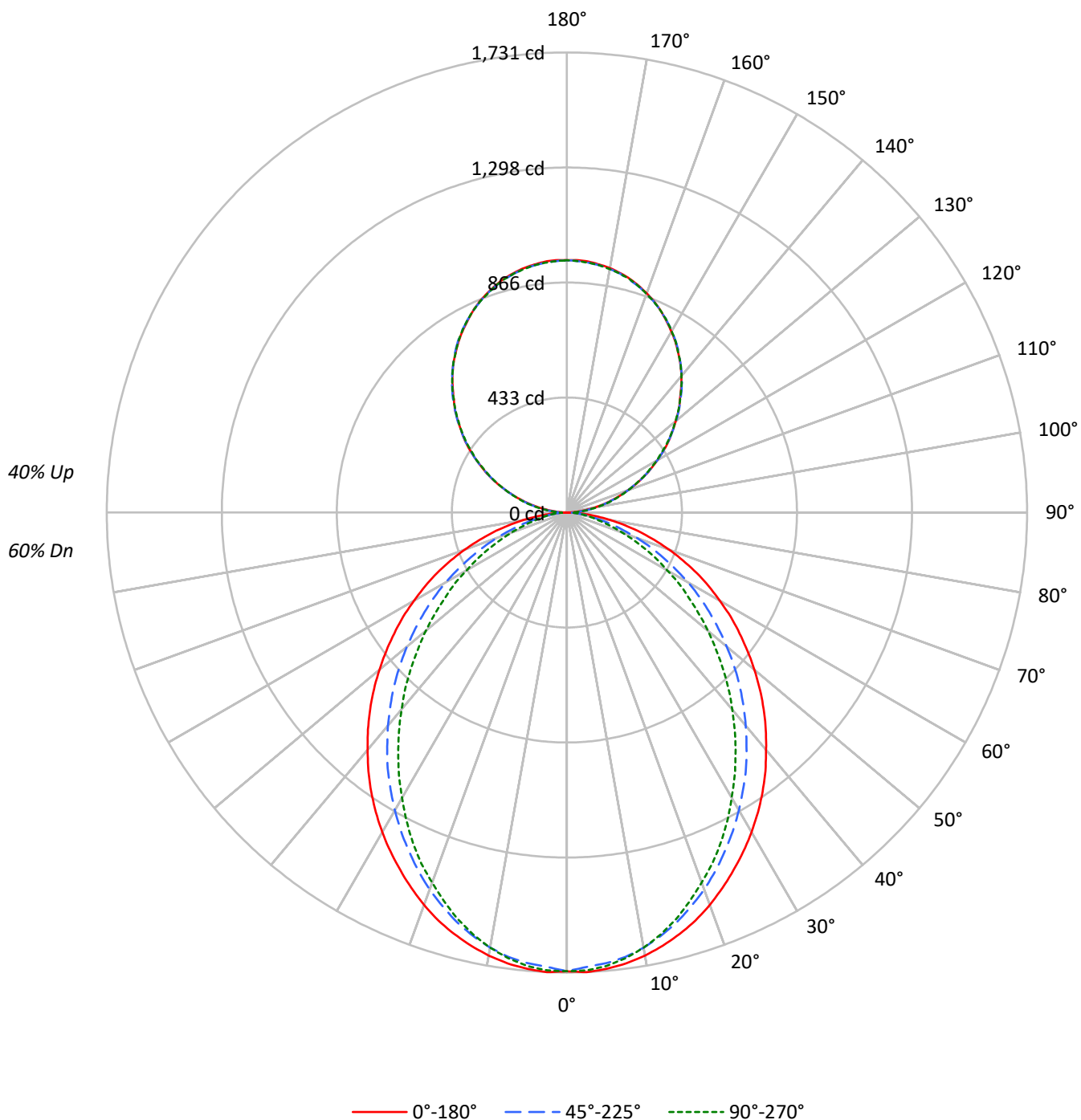
Lumens per Lamp: N/A
Luminaire Lumens: 6624.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.9
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	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	58	57	56
2	92	84	78	73	85	79	74	69	69	65	62	60	57	55	52	50	48
3	84	74	67	61	78	70	63	58	61	56	52	54	50	46	46	43	41
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	41	38	36
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31
6	65	53	45	39	61	50	43	38	44	39	34	39	34	31	34	30	28
7	60	48	40	35	56	45	38	33	40	35	30	36	31	27	31	27	25
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18

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	2.5
10°-20°	452.5	6.8
20°-30°	653.3	9.9
30°-40°	740.4	11.2
40°-50°	714.9	10.8
50°-60°	594.3	9.0
60°-70°	410.2	6.2
70°-80°	207.3	3.1
80°-90°	54.7	0.8
90°-100°	61.9	0.9
100°-110°	185.3	2.8
110°-120°	314.8	4.8
120°-130°	415.2	6.3
130°-140°	466.4	7.0
140°-150°	458.4	6.9
150°-160°	385.5	5.8
160°-170°	256.5	3.9
170°-180°	89.8	1.4
0°-30°	1268.1	19.1
0°-40°	2008.6	30.3
0°-60°	3317.8	50.1
0°-90°	3990.0	60.2
90°-120°	562.1	8.5
90°-150°	1902.1	28.7
90°-180°	2634.0	39.8
0°-180°	6624.0	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	10	16	21	22	7
95°	44	51	56	58	58	48
105°	171	172	175	177	179	181
115°	320	320	319	318	317	316
125°	466	466	466	464	462	416
135°	601	606	606	604	602	465
145°	730	734	734	734	731	457
155°	837	837	836	839	836	385
165°	911	909	908	912	909	257
175°	948	944	943	949	943	90
180°	949	949	949	949	949	

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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°	2.2	10.3	16.2	20.6	22.0
92.5°	19.1	28.6	32.3	34.5	35.2
95°	44.1	50.7	55.8	58.0	58.0
97.5°	70.5	76.4	82.2	85.2	85.2
100°	102.8	105.7	112.3	113.8	113.8
102.5°	136.6	137.3	143.2	145.4	146.1
105°	171.1	171.8	174.7	176.9	179.1
107.5°	207.0	207.8	208.5	211.4	210.7
110°	243.8	245.2	244.5	243.0	245.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	281.9	280.5	280.5	280.5
115°	320.1	320.1	318.6	317.9	317.2
117.5°	356.1	356.1	355.3	353.1	350.9
120°	392.1	395.0	392.8	389.1	390.6
122.5°	429.5	430.2	429.5	427.3	423.6
125°	466.2	466.2	465.5	464.0	462.5
127.5°	499.2	501.5	500.0	498.5	497.8
130°	534.5	536.7	536.7	535.2	532.3
132.5°	570.5	571.9	571.2	569.7	569.0
135°	601.3	605.7	605.7	604.2	602.0
137.5°	635.8	638.0	639.5	637.3	638.0
140°	670.3	671.8	671.8	671.0	670.3
142.5°	701.9	703.4	702.6	702.6	702.6
145°	730.5	733.5	734.2	733.5	731.3
147.5°	759.9	763.6	762.8	762.1	761.4
150°	786.3	789.3	789.3	789.3	788.5
152.5°	811.3	812.7	813.5	815.7	813.5
155°	837.0	837.0	836.2	839.2	836.2
157.5°	859.0	857.5	857.5	859.7	857.5
160°	878.1	877.4	876.6	878.8	875.2
162.5°	895.7	893.5	892.8	897.2	893.5
165°	911.1	908.9	907.5	911.9	908.9
167.5°	923.6	920.7	920.7	925.1	920.7
170°	933.9	930.2	930.9	935.4	930.2
172.5°	941.2	938.3	938.3	943.4	938.3
175°	947.8	944.2	943.4	948.6	943.4
177.5°	950.8	947.1	947.1	952.2	946.4
180°	949.3	949.3	949.3	949.3	949.3

(END OF REPORT)