

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: P1013251

Luminaire Tested: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1013251
REPORT IS A COMBINATION OF REPORTS P998994 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D810UB2750-4F0-XX-W2A-F_5000K
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

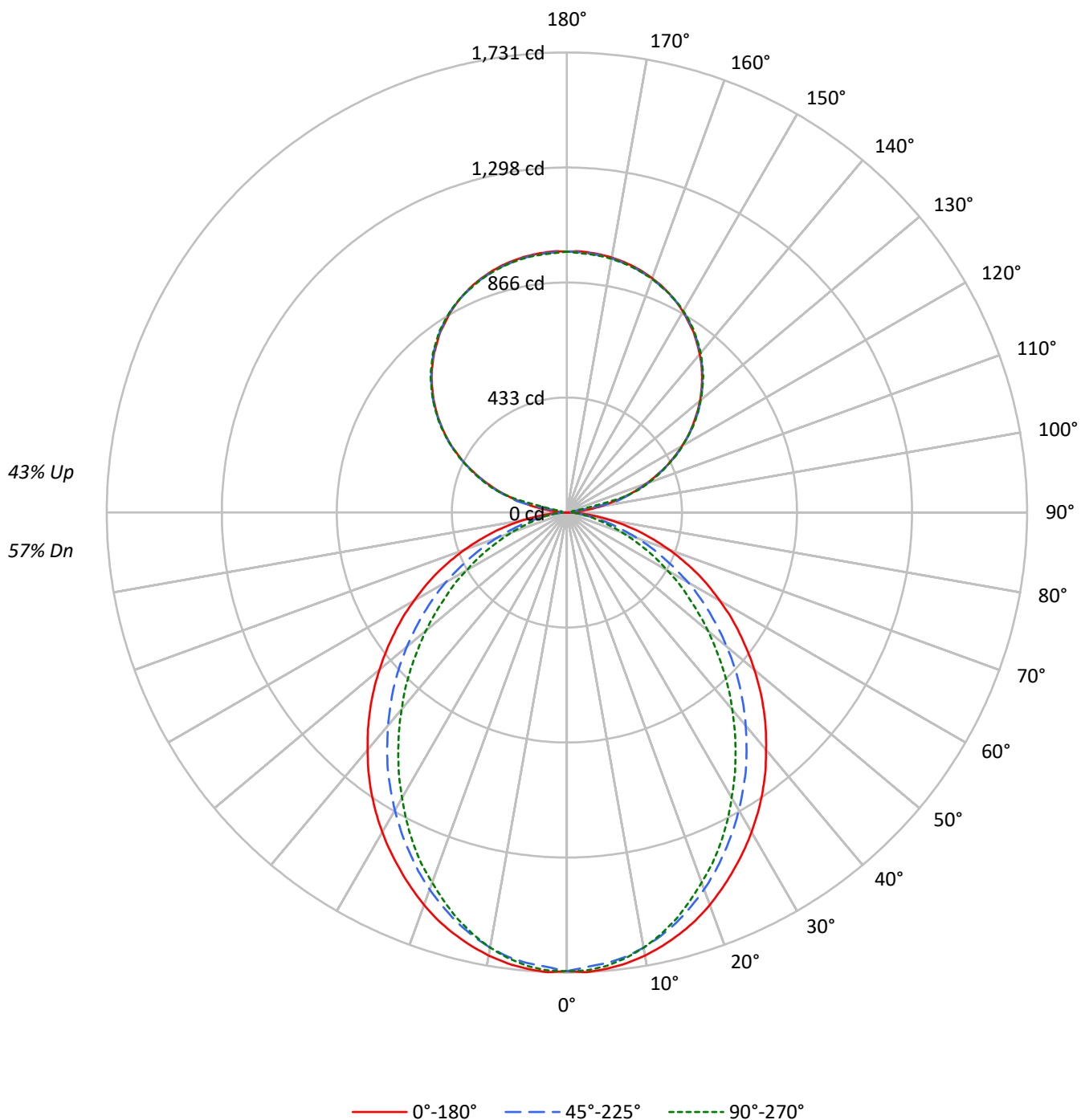
Lumens per Lamp: N/A
Luminaire Lumens: 7028.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	100	95	92	88	93	89	86	83	77	74	72	66	64	62	56	54	53
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	49	47	45
3	83	74	67	61	77	69	63	57	60	55	51	52	48	45	44	41	39
4	76	66	58	52	71	61	54	49	54	48	44	46	42	39	39	36	34
5	70	59	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30
6	65	53	45	39	60	49	42	37	43	38	33	38	33	30	32	29	26
7	60	48	40	34	56	45	38	33	39	34	29	34	30	26	30	26	23
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	23	20	17

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	2.3
10°-20°	452.5	6.4
20°-30°	653.3	9.3
30°-40°	740.4	10.5
40°-50°	714.9	10.2
50°-60°	594.3	8.5
60°-70°	410.2	5.8
70°-80°	207.3	2.9
80°-90°	54.7	0.8
90°-100°	32.6	0.5
100°-110°	214.6	3.1
110°-120°	409.8	5.8
120°-130°	520.3	7.4
130°-140°	556.6	7.9
140°-150°	520.4	7.4
150°-160°	419.7	6.0
160°-170°	270.7	3.9
170°-180°	93.3	1.3
0°-30°	1268.1	18.0
0°-40°	2008.6	28.6
0°-60°	3317.8	47.2
0°-90°	3990.0	56.8
90°-120°	657.0	9.3
90°-150°	2254.3	32.1
90°-180°	3038.0	43.2
0°-180°	7028.0	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	6
95°	40	15	16	21	21	50
105°	221	225	229	236	209	231
115°	413	415	414	416	416	406
125°	580	583	582	584	584	518
135°	720	719	722	723	725	554
145°	830	832	832	833	834	518
155°	910	911	908	911	909	420
165°	960	956	956	962	955	271
175°	982	977	978	985	976	93
180°	982	982	982	982	982	

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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°	11.0	9.5	15.4	19.8	19.8
95°	40.4	15.4	16.2	20.6	21.3
97.5°	77.1	93.3	16.2	19.8	20.6
100°	120.4	133.6	32.3	19.8	20.6
102.5°	168.9	177.7	186.5	21.3	21.3
105°	221.0	225.4	229.1	235.7	209.3
107.5°	268.8	271.0	276.1	279.8	282.7
110°	317.2	319.4	323.8	325.3	327.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.2	368.6	370.1	369.4	372.3
115°	412.7	414.9	414.2	415.6	415.6
117.5°	456.0	458.9	461.2	460.4	460.4
120°	500.1	503.0	502.3	503.7	502.3
122.5°	541.2	542.7	544.1	544.9	543.4
125°	580.1	583.0	581.6	583.8	584.5
127.5°	617.6	618.3	622.0	621.2	620.5
130°	653.5	654.3	656.5	657.2	657.2
132.5°	686.6	688.1	691.0	691.7	691.0
135°	719.6	718.9	721.8	723.3	724.8
137.5°	749.0	749.0	752.7	754.1	753.4
140°	777.6	779.1	780.6	782.8	783.5
142.5°	803.3	806.3	807.0	808.5	808.5
145°	829.8	832.0	832.0	832.7	834.2
147.5°	850.3	854.7	854.0	854.7	855.5
150°	873.1	876.0	875.3	875.3	876.0
152.5°	892.2	894.4	892.9	894.4	893.7
155°	909.8	910.6	908.3	911.3	909.1
157.5°	925.2	925.2	922.3	926.0	922.3
160°	938.5	936.3	935.5	939.9	935.5
162.5°	950.2	947.3	946.5	950.9	945.8
165°	959.8	956.1	956.1	962.0	955.3
167.5°	967.8	964.2	963.4	970.0	962.7
170°	974.4	970.0	970.8	976.6	969.3
172.5°	978.8	974.4	975.2	981.0	973.0
175°	981.8	977.4	978.1	984.7	975.9
177.5°	984.0	978.8	980.3	986.2	977.4
180°	981.8	981.8	981.8	981.8	981.8

(END OF REPORT)