

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: P1025988

Luminaire Tested: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025988
REPORT IS A COMBINATION OF REPORTS P998898 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB50-4F0-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

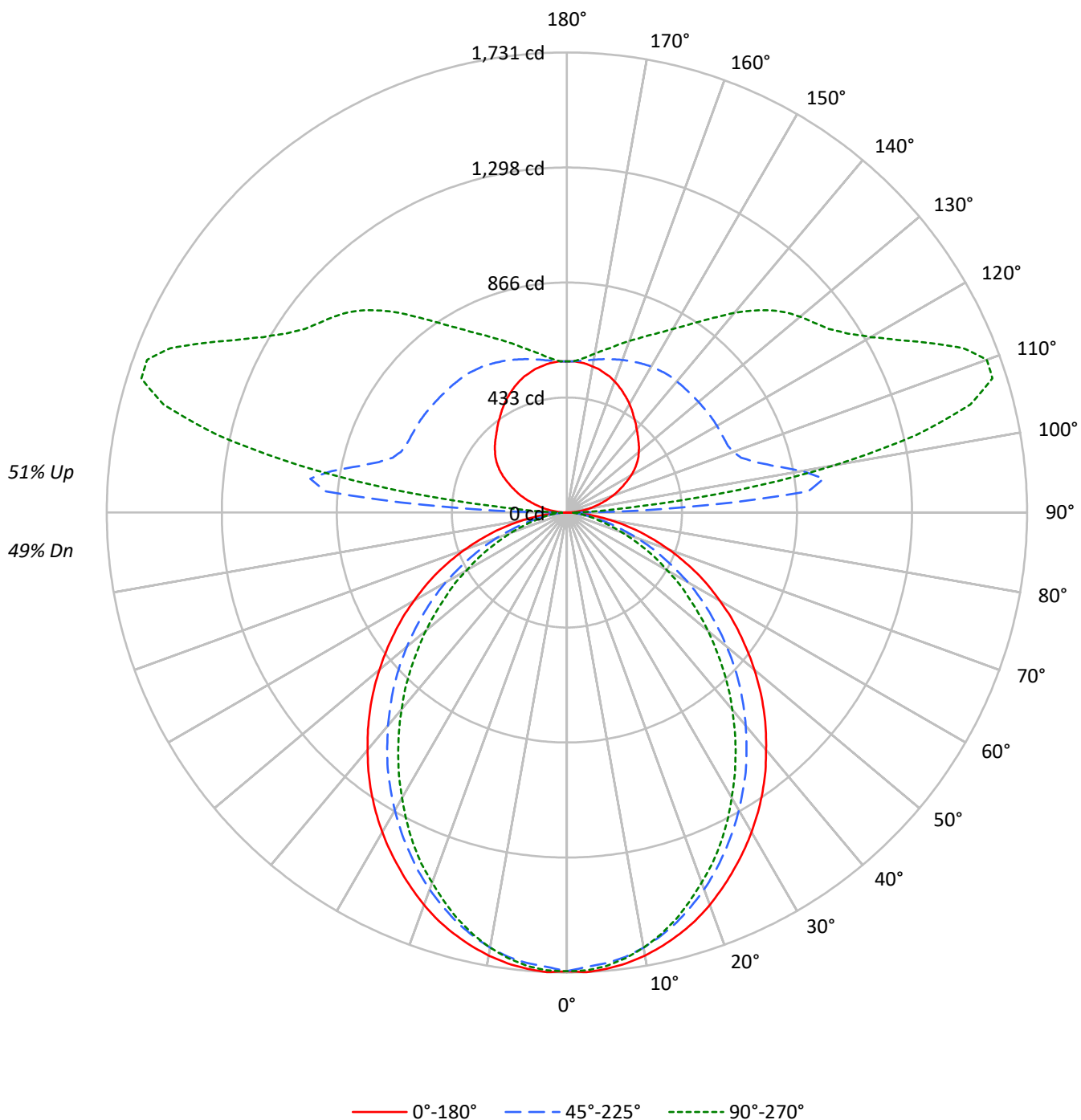
Lumens per Lamp: N/A
Luminaire Lumens: 8138.3 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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

TEST NUMBER: P1025988

CATALOG NUMBER: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1025988

CATALOG NUMBER: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	49	48	47
2	89	82	76	71	82	76	71	66	64	60	57	54	51	48	44	42	40
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	36	34
4	75	64	56	50	69	59	53	47	51	45	41	43	39	36	35	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26
6	63	51	43	38	58	48	41	36	41	35	31	35	30	27	29	26	23
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15

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

TEST NUMBER: P1025988

CATALOG NUMBER: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	2.0
10°-20°	452.5	5.6
20°-30°	653.3	8.0
30°-40°	740.4	9.1
40°-50°	714.9	8.8
50°-60°	594.3	7.3
60°-70°	410.2	5.0
70°-80°	207.3	2.5
80°-90°	54.8	0.7
90°-100°	422.2	5.2
100°-110°	858.7	10.6
110°-120°	765.4	9.4
120°-130°	642.9	7.9
130°-140°	536.5	6.6
140°-150°	409.8	5.0
150°-160°	288.0	3.5
160°-170°	169.4	2.1
170°-180°	55.1	0.7
0°-30°	1268.1	15.6
0°-40°	2008.6	24.7
0°-60°	3317.8	40.8
0°-90°	3990.2	49.0
90°-120°	2046.3	25.1
90°-150°	3635.6	44.7
90°-180°	4148.0	51.0
0°-180°	8138.3	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°	1	9	20	22	24	7
95°	37	116	910	451	272	40
105°	131	189	732	1577	1571	139
115°	230	289	653	1255	1509	228
125°	320	381	650	1068	1204	286
135°	381	453	644	948	1076	294
145°	439	502	641	800	879	275
155°	499	539	623	706	736	230
165°	544	561	597	633	642	154
175°	567	568	573	581	578	54
180°	568	568	568	568	568	

TEST NUMBER: P1025988

CATALOG NUMBER: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

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°	1.1	8.9	20.1	22.3	23.5
92.5°	15.6	86.0	437.7	144.6	101.6
95°	36.9	116.2	910.1	450.6	272.5
97.5°	61.4	128.4	973.8	920.2	654.4
100°	84.9	145.2	897.8	1273.0	1024.0
102.5°	107.2	165.2	802.9	1494.2	1345.6
105°	130.7	189.3	732.5	1577.3	1571.2
107.5°	156.3	213.8	686.8	1552.2	1678.4
110°	182.0	238.4	665.5	1462.8	1680.6

TEST NUMBER: P1025988

CATALOG NUMBER: S124RDIP-B1020D1205UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.6	263.0	655.5	1353.4	1614.7
115°	230.0	288.6	653.3	1255.2	1508.6
117.5°	254.6	312.6	652.1	1178.1	1404.8
120°	279.2	336.2	652.1	1126.2	1319.9
122.5°	301.5	359.0	651.0	1092.1	1252.9
125°	320.5	380.8	649.9	1068.1	1203.8
127.5°	338.4	400.9	647.7	1045.2	1172.5
130°	352.9	420.4	646.6	1017.9	1145.7
132.5°	367.4	437.2	645.4	985.5	1115.6
135°	380.8	453.4	644.3	948.1	1076.5
137.5°	394.2	467.4	644.3	907.9	1030.7
140°	408.7	480.2	643.2	868.8	980.5
142.5°	424.3	491.9	643.2	832.4	926.9
145°	438.9	502.5	641.0	799.6	878.8
147.5°	455.6	512.6	637.6	772.2	834.2
150°	471.2	522.0	634.3	747.0	797.3
152.5°	485.8	531.0	628.7	725.8	763.8
155°	499.2	538.8	623.1	705.7	735.9
157.5°	512.6	546.1	617.5	686.8	710.2
160°	524.8	552.2	610.8	667.8	686.8
162.5°	536.0	557.2	604.1	649.3	664.4
165°	543.8	560.6	597.4	632.6	642.1
167.5°	552.8	563.4	590.7	618.1	624.2
170°	558.3	565.6	584.0	603.6	607.5
172.5°	563.9	567.3	577.3	590.7	590.7
175°	567.3	568.4	572.9	580.7	578.4
177.5°	569.5	568.4	569.5	573.4	569.5
180°	568.4	568.4	568.4	568.4	568.4

(END OF REPORT)