

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: P1024847

Luminaire Tested: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024847
REPORT IS A COMBINATION OF REPORTS P995177 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

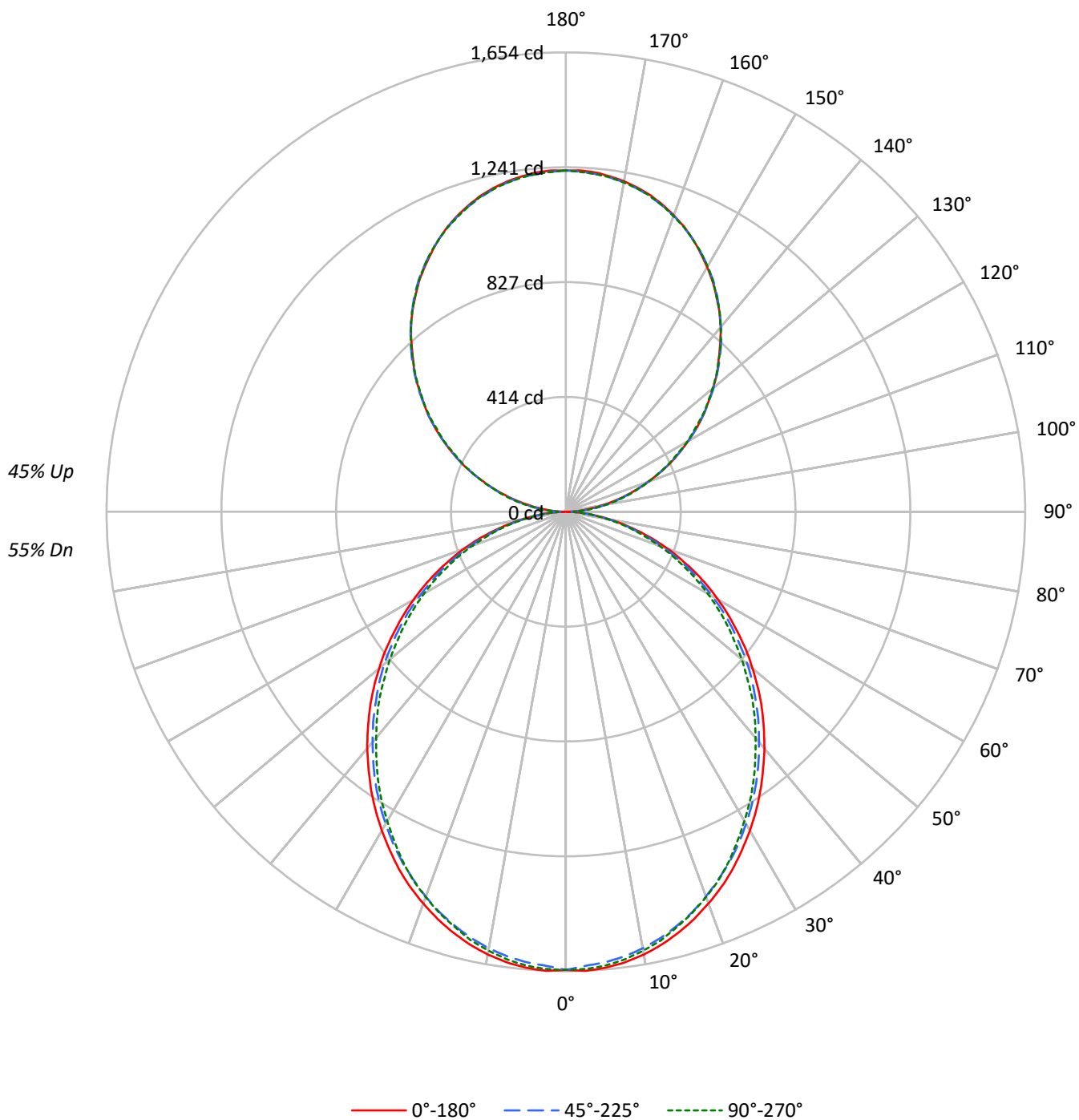
Lumens per Lamp: N/A
Luminaire Lumens: 7644.0 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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: P1024847

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	82	76	73	71	64	63	61	54	53	52
2	90	83	76	71	83	77	71	67	66	62	59	57	53	51	47	45	43
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	70	60	53	47	52	46	42	45	40	37	38	34	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	24
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	19
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

TEST NUMBER: P1024847

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	2.0
10°-20°	437.9	5.7
20°-30°	644.5	8.4
30°-40°	749.2	9.8
40°-50°	749.1	9.8
50°-60°	655.2	8.6
60°-70°	486.5	6.4
70°-80°	276.0	3.6
80°-90°	81.7	1.1
90°-100°	80.1	1.0
100°-110°	239.8	3.1
110°-120°	407.4	5.3
120°-130°	537.3	7.0
130°-140°	603.5	7.9
140°-150°	593.2	7.8
150°-160°	498.9	6.5
160°-170°	332.0	4.3
170°-180°	116.2	1.5
0°-30°	1237.9	16.2
0°-40°	1987.1	26.0
0°-60°	3391.5	44.4
0°-90°	4235.6	55.4
90°-120°	727.4	9.5
90°-150°	2461.3	32.2
90°-180°	3408.0	44.6
0°-180°	7644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	3	13	21	27	28	9
95°	57	66	72	75	75	62
105°	221	222	226	229	232	235
115°	414	414	412	411	410	409
125°	603	603	602	600	598	538
135°	778	784	784	782	779	602
145°	945	949	950	949	946	592
155°	1083	1083	1082	1086	1082	498
165°	1179	1176	1174	1180	1176	332
175°	1226	1222	1221	1228	1221	116
180°	1228	1228	1228	1228	1228	

TEST NUMBER: P1024847

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	2.9	13.3	20.9	26.6	28.5
92.5°	24.7	37.1	41.8	44.7	45.6
95°	57.0	65.6	72.2	75.1	75.1
97.5°	91.2	98.8	106.4	110.2	110.2
100°	133.0	136.8	145.4	147.3	147.3
102.5°	176.7	177.7	185.3	188.1	189.1
105°	221.4	222.3	226.1	229.0	231.8
107.5°	267.9	268.9	269.8	273.6	272.7
110°	315.4	317.3	316.4	314.5	317.3

TEST NUMBER: P1024847

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	364.8	364.8	362.9	362.9	362.9
115°	414.2	414.2	412.3	411.4	410.4
117.5°	460.8	460.8	459.8	457.0	454.1
120°	507.3	511.1	508.3	503.5	505.4
122.5°	555.8	556.7	555.8	552.9	548.2
125°	603.3	603.3	602.3	600.4	598.5
127.5°	646.0	648.9	647.0	645.1	644.1
130°	691.6	694.5	694.5	692.6	688.8
132.5°	738.2	740.1	739.1	737.2	736.3
135°	778.1	783.8	783.8	781.9	779.0
137.5°	822.7	825.6	827.5	824.6	825.6
140°	867.4	869.3	869.3	868.3	867.4
142.5°	908.2	910.1	909.2	909.2	909.2
145°	945.3	949.1	950.0	949.1	946.2
147.5°	983.3	988.0	987.1	986.1	985.2
150°	1017.5	1021.3	1021.3	1021.3	1020.3
152.5°	1049.8	1051.7	1052.6	1055.5	1052.6
155°	1083.0	1083.0	1082.1	1085.9	1082.1
157.5°	1111.6	1109.7	1109.7	1112.5	1109.7
160°	1136.3	1135.3	1134.4	1137.2	1132.5
162.5°	1159.1	1156.2	1155.3	1161.0	1156.2
165°	1179.0	1176.2	1174.3	1180.0	1176.2
167.5°	1195.2	1191.4	1191.4	1197.1	1191.4
170°	1208.5	1203.7	1204.7	1210.4	1203.7
172.5°	1218.0	1214.2	1214.2	1220.8	1214.2
175°	1226.5	1221.8	1220.8	1227.5	1220.8
177.5°	1230.3	1225.6	1225.6	1232.2	1224.6
180°	1228.4	1228.4	1228.4	1228.4	1228.4

(END OF REPORT)