

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: P1024848

Luminaire Tested: S124DIP-B1020D1035UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024848
REPORT IS A COMBINATION OF REPORTS P995178 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-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

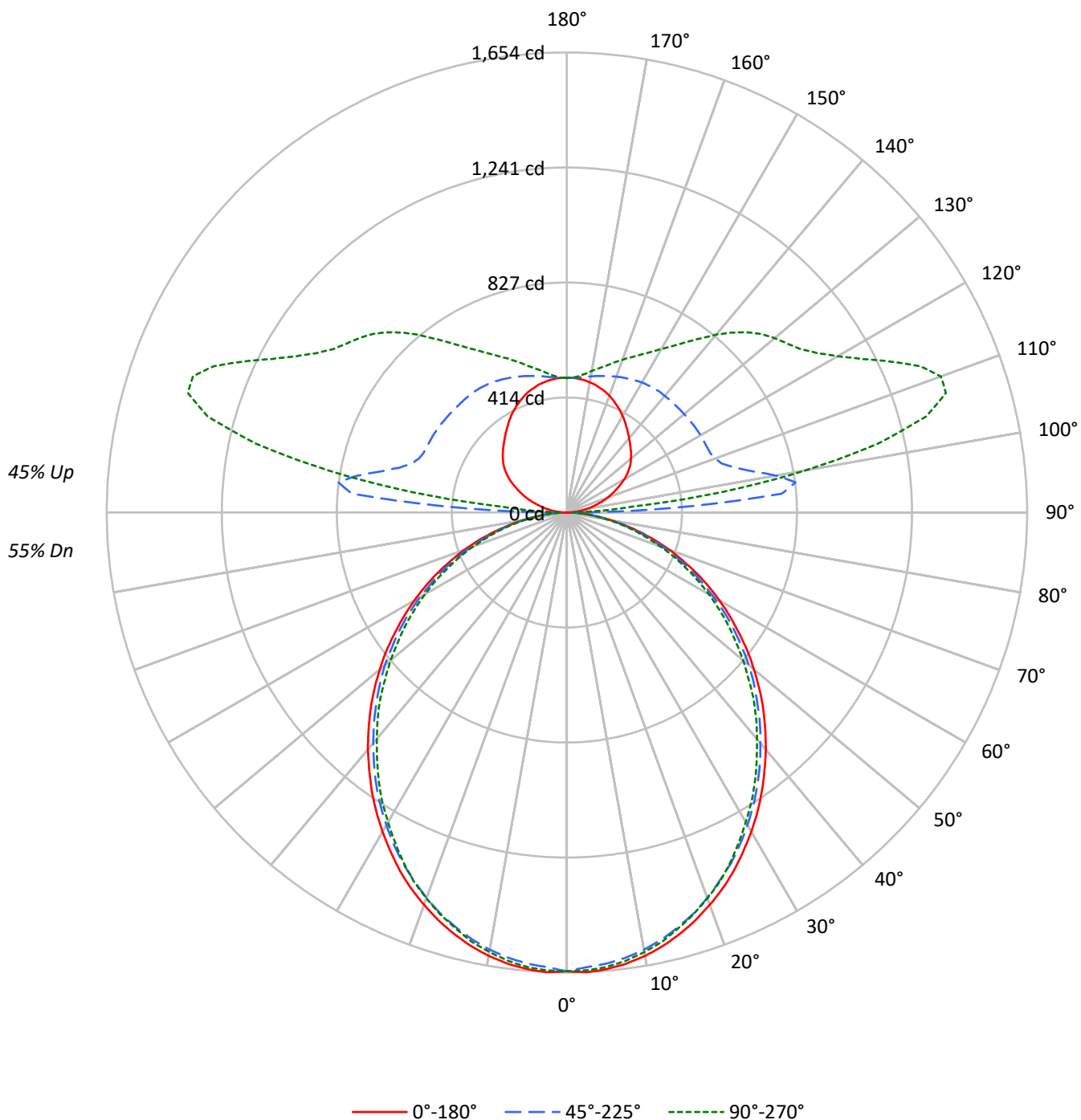
Lumens per Lamp: N/A
Luminaire Lumens: 7765.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1024848

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1024848

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	36
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	31
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	33	30	27
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	24	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	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: P1024848

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	2.0
10°-20°	437.9	5.6
20°-30°	644.5	8.3
30°-40°	749.2	9.6
40°-50°	749.1	9.6
50°-60°	655.2	8.4
60°-70°	486.5	6.3
70°-80°	276.0	3.6
80°-90°	80.9	1.0
90°-100°	359.3	4.6
100°-110°	730.8	9.4
110°-120°	651.4	8.4
120°-130°	547.2	7.0
130°-140°	456.6	5.9
140°-150°	348.7	4.5
150°-160°	245.1	3.2
160°-170°	144.2	1.9
170°-180°	46.9	0.6
0°-30°	1237.9	15.9
0°-40°	1987.1	25.6
0°-60°	3391.5	43.7
0°-90°	4234.9	54.5
90°-120°	1741.5	22.4
90°-150°	3094.0	39.8
90°-180°	3530.0	45.5
0°-180°	7765.0	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°	1	8	17	19	20	7
95°	31	99	774	384	232	34
105°	111	161	623	1342	1337	118
115°	196	246	556	1068	1284	194
125°	273	324	553	909	1024	243
135°	324	386	548	807	916	250
145°	374	428	546	680	748	234
155°	425	459	530	601	626	196
165°	463	477	508	538	546	131
175°	483	484	488	494	492	46
180°	484	484	484	484	484	

TEST NUMBER: P1024848

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F4

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°	1.0	7.6	17.1	19.0	20.0
92.5°	13.3	73.2	372.5	123.0	86.5
95°	31.4	98.8	774.5	383.5	231.9
97.5°	52.3	109.3	828.7	783.1	556.9
100°	72.2	123.6	764.1	1083.4	871.5
102.5°	91.2	140.6	683.3	1271.6	1145.2
105°	111.2	161.1	623.4	1342.4	1337.1
107.5°	133.0	182.0	584.5	1321.0	1428.4
110°	154.9	202.9	566.4	1245.0	1430.3

TEST NUMBER: P1024848

CATALOG NUMBER: S124DIP-B1020D1035UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.8	223.8	557.9	1151.8	1374.2
115°	195.8	245.6	556.0	1068.2	1283.9
117.5°	216.7	266.1	555.0	1002.6	1195.5
120°	237.6	286.0	555.0	958.4	1123.3
122.5°	256.6	305.5	554.1	929.4	1066.3
125°	272.7	324.1	553.1	909.0	1024.5
127.5°	288.0	341.2	551.2	889.5	997.9
130°	300.3	357.8	550.2	866.2	975.1
132.5°	312.7	372.0	549.3	838.7	949.4
135°	324.1	385.8	548.3	806.8	916.1
137.5°	335.5	397.7	548.3	772.6	877.2
140°	347.8	408.6	547.4	739.3	834.4
142.5°	361.1	418.6	547.4	708.5	788.8
145°	373.5	427.6	545.5	680.4	747.9
147.5°	387.7	436.2	542.6	657.2	709.9
150°	401.0	444.3	539.8	635.8	678.5
152.5°	413.4	451.9	535.0	617.8	650.0
155°	424.8	458.6	530.3	600.6	626.3
157.5°	436.2	464.7	525.5	584.4	604.4
160°	446.7	470.0	519.8	568.3	584.5
162.5°	456.2	474.2	514.1	552.6	565.5
165°	462.8	477.0	508.4	538.4	546.4
167.5°	470.4	479.4	502.7	526.0	531.2
170°	475.2	481.4	497.0	513.7	517.0
172.5°	479.9	482.8	491.3	502.8	502.7
175°	482.8	483.7	487.5	494.2	492.3
177.5°	484.7	483.7	484.7	488.0	484.7
180°	483.7	483.7	483.7	483.7	483.7

(END OF REPORT)