

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: P1024884

Luminaire Tested: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024884
REPORT IS A COMBINATION OF REPORTS P995229 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

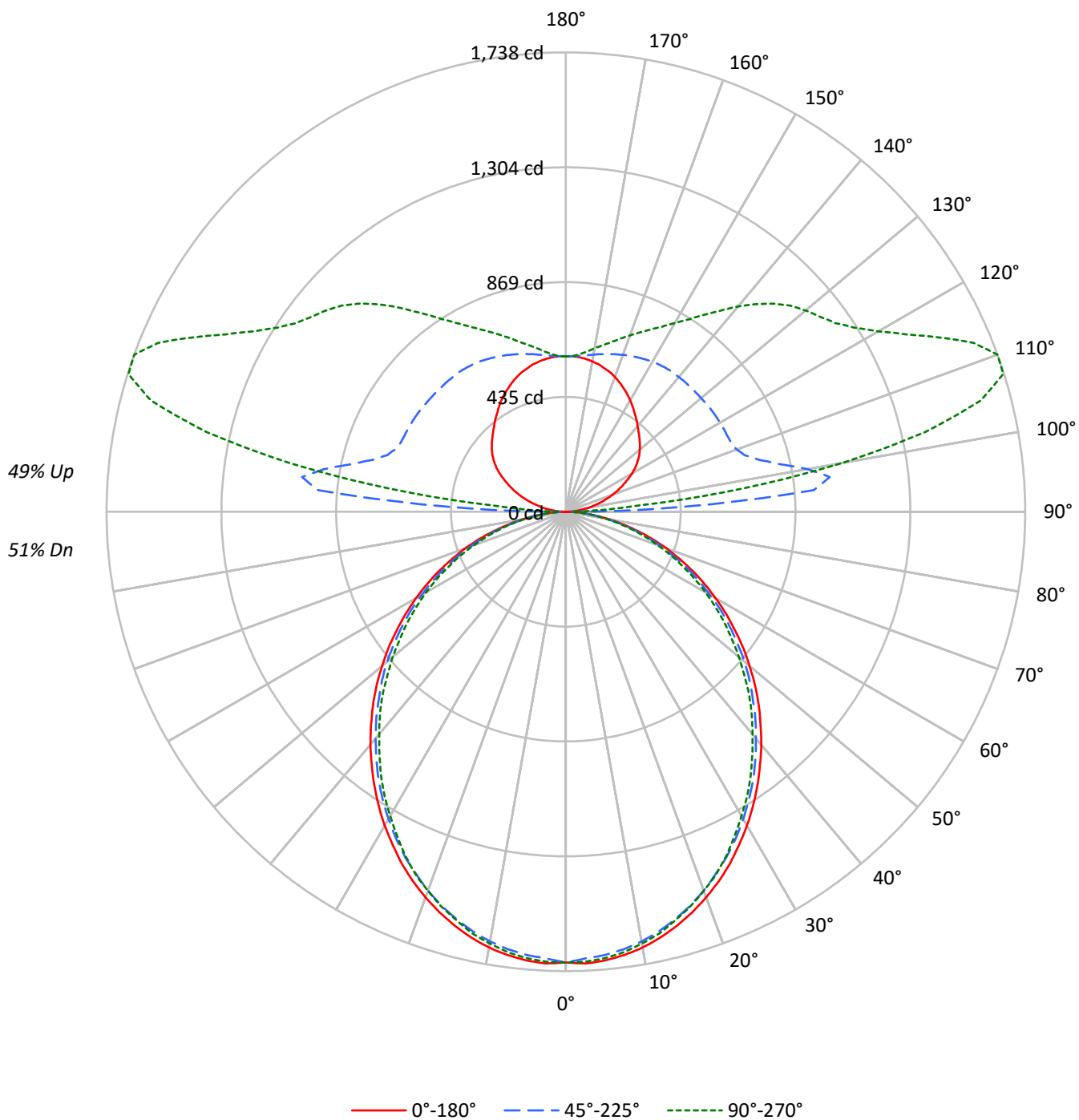
Lumens per Lamp: N/A
Luminaire Lumens: 8668.6 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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: P1024884

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1024884

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-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
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57
1	98	94	90	86	90	86	83	80	73	71	69		61	59	58		50
2	89	82	75	70	82	76	70	66	64	60	57		54	51	48		44
3	81	72	64	59	75	67	60	55	57	52	48		47	44	41		39
4	74	64	56	50	68	59	52	47	50	45	41		42	38	35		35
5	68	57	48	42	63	53	45	40	45	39	35		38	34	30		31
6	63	51	43	37	58	47	40	35	41	35	31		34	30	27		28
7	58	46	38	32	54	43	36	30	37	31	27		31	27	24		26
8	54	42	34	29	50	39	32	27	34	28	24		29	24	21		24
9	50	38	30	25	46	36	29	24	31	25	21		26	22	19		22
10	47	35	28	23	43	33	26	22	28	23	19		24	20	17		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13906	13906	13906
5°	13917	13506	13522
10°	13800	13130	13039
15°	13602	12685	12494
20°	13349	12203	11929
25°	13064	11693	11321
30°	12721	11142	10654
35°	12365	10579	10010
40°	11995	9972	9324
45°	11608	9363	8683
50°	11177	8773	7973
55°	10710	8084	7267
60°	10231	7329	6533
65°	9684	6550	5705
70°	9053	5611	4818
75°	8112	4522	3859
80°	6914	3269	2714
85°	5370	1822	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11608 cd/sqm

TEST NUMBER: P1024884

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	1.9
10°-20°	452.8	5.2
20°-30°	666.4	7.7
30°-40°	774.7	8.9
40°-50°	774.6	8.9
50°-60°	677.5	7.8
60°-70°	503.0	5.8
70°-80°	285.4	3.3
80°-90°	84.0	1.0
90°-100°	436.6	5.0
100°-110°	888.0	10.2
110°-120°	791.5	9.1
120°-130°	664.8	7.7
130°-140°	554.8	6.4
140°-150°	423.7	4.9
150°-160°	297.8	3.4
160°-170°	175.2	2.0
170°-180°	57.0	0.7
0°-30°	1280.0	14.8
0°-40°	2054.7	23.7
0°-60°	3506.8	40.5
0°-90°	4379.2	50.5
90°-120°	2116.0	24.4
90°-150°	3759.4	43.4
90°-180°	4289.0	49.5
0°-180°	8668.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1704	1698	1683	1698	1696	162
15°	1622	1616	1596	1604	1600	457
25°	1469	1459	1440	1442	1436	676
35°	1264	1254	1235	1226	1219	790
45°	1032	1022	1000	985	981	795
55°	780	776	757	741	732	699
65°	529	522	508	495	488	523
75°	282	275	268	262	261	299
85°	74	74	71	71	70	79
90°	1	9	21	23	24	7
95°	38	120	941	466	282	42
105°	135	196	758	1631	1625	144
115°	238	298	676	1298	1560	236
125°	331	394	672	1104	1245	295
135°	394	469	666	980	1113	304
145°	454	520	663	827	909	285
155°	516	557	644	730	761	238
165°	562	580	618	654	664	159
175°	587	588	592	600	598	56
180°	588	588	588	588	588	

TEST NUMBER: P1024884

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.3	1705.3	1705.3	1705.3	1705.3
2.5°	1710.8	1706.7	1691.6	1705.3	1703.9
5°	1703.9	1698.5	1683.4	1698.5	1695.7
7.5°	1691.6	1686.2	1669.8	1682.1	1680.7
10°	1673.9	1668.4	1650.6	1661.6	1658.8
12.5°	1650.6	1645.2	1626.1	1638.4	1634.3
15°	1622.0	1616.5	1596.0	1604.2	1600.1
17.5°	1589.2	1582.3	1563.2	1568.7	1565.9
20°	1552.3	1545.4	1524.9	1529.0	1526.3
22.5°	1512.6	1503.1	1482.6	1490.8	1485.3
25°	1468.9	1459.3	1440.2	1441.6	1436.1
27.5°	1419.7	1410.2	1392.4	1389.7	1382.8
30°	1370.5	1359.6	1341.8	1336.4	1329.5
32.5°	1318.6	1309.0	1289.9	1283.1	1276.2
35°	1263.9	1254.4	1235.3	1225.7	1218.9
37.5°	1206.6	1198.4	1177.9	1168.3	1158.7
40°	1150.5	1139.6	1119.1	1105.4	1098.6
42.5°	1090.4	1084.9	1061.7	1045.3	1041.2
45°	1031.7	1022.1	1000.2	985.2	981.1
47.5°	970.2	963.3	942.8	926.4	915.5
50°	907.3	901.8	882.7	863.6	855.4
52.5°	845.8	839.0	818.5	802.1	791.2
55°	780.2	776.1	757.0	740.6	732.4
57.5°	718.7	714.6	695.5	679.1	670.9
60°	654.5	647.7	629.9	617.6	610.8
62.5°	591.7	586.2	567.1	556.1	549.3
65°	528.8	522.0	508.3	494.6	487.8
67.5°	464.6	459.1	445.5	431.8	430.4
70°	405.8	396.3	385.3	374.4	370.3
72.5°	343.0	333.4	325.2	317.0	312.9
75°	281.5	274.7	267.8	262.4	261.0
77.5°	221.4	218.6	211.8	210.4	206.3
80°	168.1	164.0	161.2	158.5	157.1
82.5°	116.1	114.8	114.8	113.4	112.0
85°	73.8	73.8	71.1	71.1	69.7
87.5°	35.5	34.2	32.8	32.8	32.8
90°	1.2	9.2	20.8	23.1	24.2
92.5°	16.2	88.9	452.6	149.6	105.1
95°	38.1	120.0	941.1	465.9	281.7
97.5°	63.5	132.8	1006.9	951.4	676.7
100°	87.8	150.1	928.4	1316.4	1058.9
102.5°	110.9	170.9	830.2	1545.0	1391.4
105°	135.1	195.8	757.5	1631.0	1624.7
107.5°	161.7	221.2	710.1	1605.0	1735.5
110°	188.2	246.5	688.2	1512.7	1737.8

TEST NUMBER: P1024884

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.6	271.9	677.8	1399.5	1669.7
115°	237.9	298.5	675.5	1297.9	1560.0
117.5°	263.3	323.4	674.3	1218.2	1452.6
120°	288.7	347.5	674.3	1164.5	1364.9
122.5°	311.8	371.2	673.2	1129.3	1295.6
125°	331.4	393.8	672.0	1104.4	1244.8
127.5°	349.9	414.6	669.7	1080.8	1212.4
130°	364.9	434.8	668.6	1052.5	1184.7
132.5°	379.9	452.1	667.4	1019.0	1153.5
135°	393.8	468.8	666.3	980.4	1113.1
137.5°	407.6	483.2	666.3	938.8	1065.8
140°	422.6	496.6	665.1	898.4	1013.8
142.5°	438.8	508.6	665.1	860.8	958.4
145°	453.8	519.6	662.8	826.8	908.8
147.5°	471.1	530.0	659.3	798.5	862.6
150°	487.3	539.8	655.9	772.5	824.5
152.5°	502.3	549.0	650.1	750.6	789.8
155°	516.2	557.2	644.3	729.8	760.9
157.5°	530.0	564.7	638.6	710.2	734.4
160°	542.7	571.0	631.6	690.5	710.1
162.5°	554.3	576.2	624.7	671.4	687.0
165°	562.3	579.7	617.8	654.2	664.0
167.5°	571.6	582.6	610.8	639.2	645.5
170°	577.4	584.8	603.9	624.1	628.2
172.5°	583.1	586.6	597.0	610.8	610.8
175°	586.6	587.7	592.4	600.4	598.1
177.5°	588.9	587.7	588.9	593.0	588.9
180°	587.7	587.7	587.7	587.7	587.7

(END OF REPORT)