

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: P1024883

Luminaire Tested: S124DIP-B1020D1205UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024883
REPORT IS A COMBINATION OF REPORTS P995228 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-F1
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

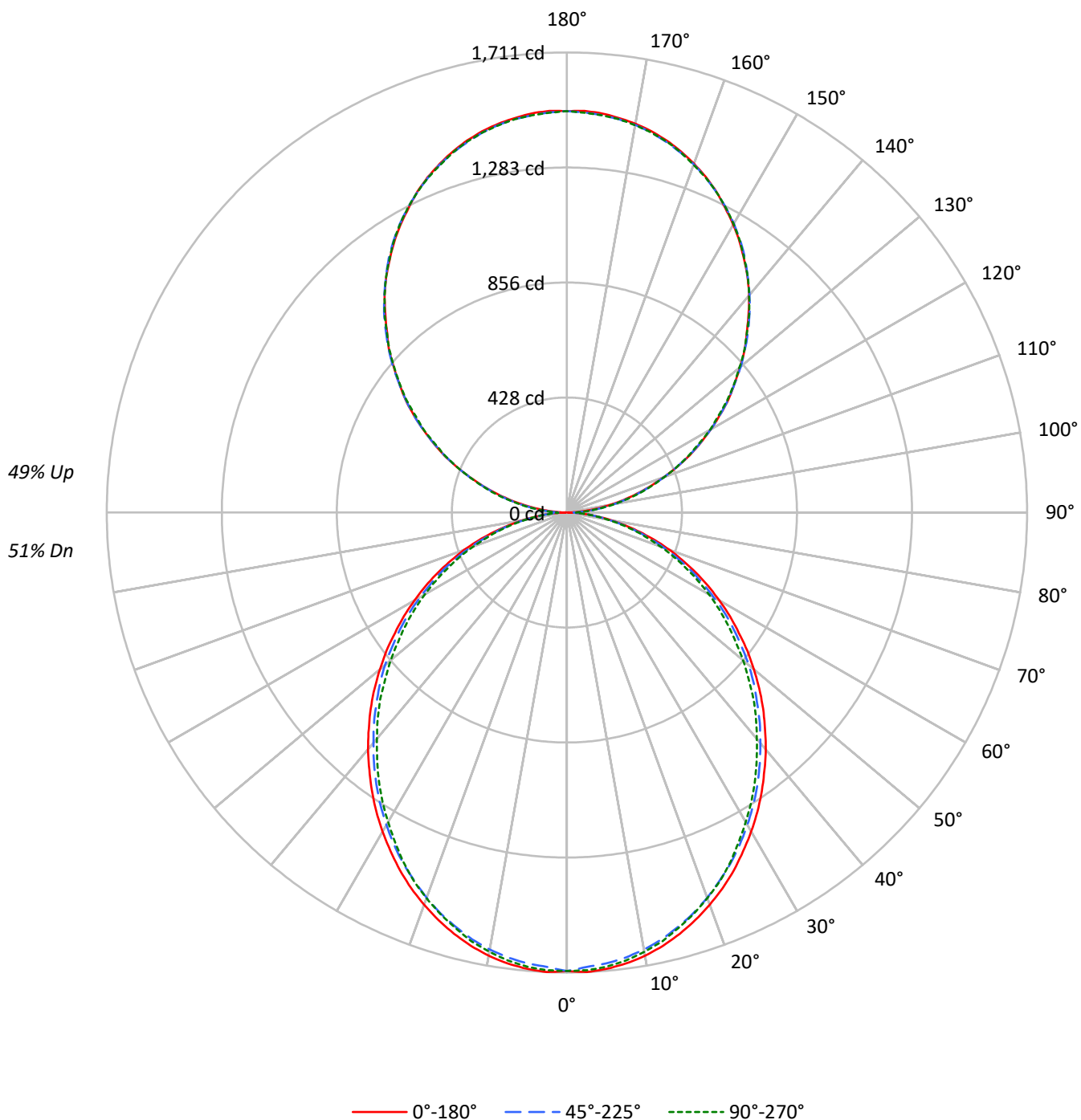
Lumens per Lamp: N/A
Luminaire Lumens: 8521.9 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1024883

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	50	48
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	31	26	47	36	29	24	31	25	22	27	22	19	22	19	17
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	17	15

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: P1024883

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	1.9
10°-20°	452.8	5.3
20°-30°	666.4	7.8
30°-40°	774.7	9.1
40°-50°	774.6	9.1
50°-60°	677.5	8.0
60°-70°	503.0	5.9
70°-80°	285.4	3.3
80°-90°	84.9	1.0
90°-100°	97.3	1.1
100°-110°	291.4	3.4
110°-120°	495.1	5.8
120°-130°	652.9	7.7
130°-140°	733.4	8.6
140°-150°	720.8	8.5
150°-160°	606.2	7.1
160°-170°	403.4	4.7
170°-180°	141.2	1.7
0°-30°	1280.0	15.0
0°-40°	2054.7	24.1
0°-60°	3506.8	41.2
0°-90°	4380.2	51.4
90°-120°	883.8	10.4
90°-150°	2990.9	35.1
90°-180°	4142.0	48.6
0°-180°	8521.9	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°	4	16	25	32	35	10
95°	69	80	88	91	91	75
105°	269	270	275	278	282	285
115°	503	503	501	500	499	496
125°	733	733	732	730	727	653
135°	946	952	952	950	947	731
145°	1149	1153	1154	1153	1150	719
155°	1316	1316	1315	1320	1315	606
165°	1433	1429	1427	1434	1429	404
175°	1490	1485	1484	1492	1484	142
180°	1493	1493	1493	1493	1493	

TEST NUMBER: P1024883

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F1

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°	3.5	16.2	25.4	32.3	34.6
92.5°	30.0	45.0	50.8	54.3	55.4
95°	69.3	79.7	87.7	91.2	91.2
97.5°	110.8	120.1	129.3	133.9	133.9
100°	161.6	166.2	176.6	178.9	178.9
102.5°	214.7	215.9	225.1	228.6	229.7
105°	269.0	270.1	274.8	278.2	281.7
107.5°	325.6	326.7	327.9	332.5	331.3
110°	383.3	385.6	384.4	382.1	385.6

TEST NUMBER: P1024883

CATALOG NUMBER: S124DIP-B1020D1205UB40-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	443.3	443.3	441.0	441.0	441.0
115°	503.4	503.4	501.0	499.9	498.7
117.5°	559.9	559.9	558.8	555.3	551.8
120°	616.5	621.1	617.6	611.9	614.2
122.5°	675.4	676.5	675.4	671.9	666.1
125°	733.1	733.1	731.9	729.6	727.3
127.5°	785.0	788.5	786.2	783.9	782.7
130°	840.5	843.9	843.9	841.6	837.0
132.5°	897.0	899.3	898.2	895.9	894.7
135°	945.5	952.4	952.4	950.1	946.7
137.5°	999.8	1003.2	1005.6	1002.1	1003.2
140°	1054.0	1056.3	1056.3	1055.2	1054.0
142.5°	1103.7	1106.0	1104.8	1104.8	1104.8
145°	1148.7	1153.3	1154.5	1153.3	1149.9
147.5°	1194.9	1200.7	1199.5	1198.3	1197.2
150°	1236.4	1241.1	1241.1	1241.1	1239.9
152.5°	1275.7	1278.0	1279.2	1282.6	1279.2
155°	1316.1	1316.1	1315.0	1319.6	1315.0
157.5°	1350.7	1348.4	1348.4	1351.9	1348.4
160°	1380.8	1379.6	1378.4	1381.9	1376.1
162.5°	1408.5	1405.0	1403.8	1410.8	1405.0
165°	1432.7	1429.2	1426.9	1433.9	1429.2
167.5°	1452.3	1447.7	1447.7	1454.6	1447.7
170°	1468.5	1462.7	1463.9	1470.8	1462.7
172.5°	1480.0	1475.4	1475.4	1483.5	1475.4
175°	1490.4	1484.7	1483.5	1491.6	1483.5
177.5°	1495.1	1489.3	1489.3	1497.4	1488.1
180°	1492.7	1492.7	1492.7	1492.7	1492.7

(END OF REPORT)