

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: P1024856

Luminaire Tested: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1024856
REPORT IS A COMBINATION OF REPORTS P995186 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

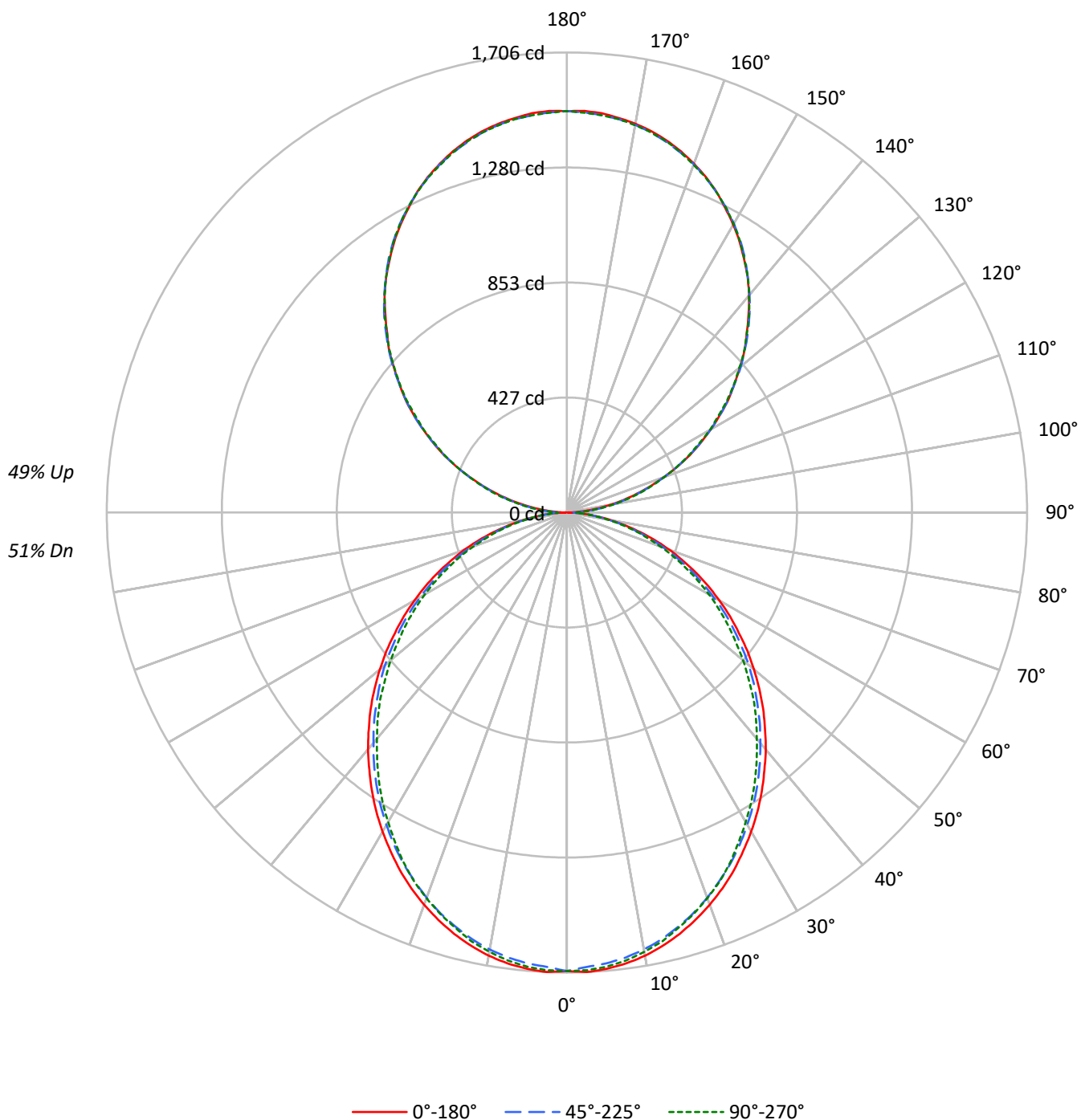
Lumens per Lamp: N/A
Luminaire Lumens: 8497.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1024856

CATALOG NUMBER: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1024856

CATALOG NUMBER: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

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	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	50	48	48	48	43
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41	41	41	36
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35	35	35	31
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	30	30	26
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	29	26	26	26	23
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	23	23	20
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	26	23	20	20	20	18
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	18	18	16
9	50	38	31	26	47	36	29	24	31	25	22	27	22	19	22	19	17	17	17	14
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	17	15	15	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

TEST NUMBER: P1024856

CATALOG NUMBER: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	1.9
10°-20°	451.5	5.3
20°-30°	664.5	7.8
30°-40°	772.4	9.1
40°-50°	772.3	9.1
50°-60°	675.5	7.9
60°-70°	501.5	5.9
70°-80°	284.5	3.3
80°-90°	84.7	1.0
90°-100°	97.0	1.1
100°-110°	290.6	3.4
110°-120°	493.7	5.8
120°-130°	651.1	7.7
130°-140°	731.2	8.6
140°-150°	718.7	8.5
150°-160°	604.5	7.1
160°-170°	402.2	4.7
170°-180°	140.8	1.7
0°-30°	1276.2	15.0
0°-40°	2048.6	24.1
0°-60°	3496.5	41.1
0°-90°	4367.2	51.4
90°-120°	881.3	10.4
90°-150°	2982.3	35.1
90°-180°	4130.0	48.6
0°-180°	8497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	4	16	25	32	34	10
95°	69	79	88	91	91	75
105°	268	269	274	277	281	284
115°	502	502	500	498	497	495
125°	731	731	730	728	725	652
135°	943	950	950	947	944	729
145°	1145	1150	1151	1150	1146	717
155°	1312	1312	1311	1316	1311	604
165°	1429	1425	1423	1430	1425	403
175°	1486	1480	1479	1487	1479	141
180°	1488	1488	1488	1488	1488	

TEST NUMBER: P1024856

CATALOG NUMBER: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	3.5	16.1	25.3	32.2	34.5
92.5°	29.9	44.9	50.7	54.1	55.3
95°	69.1	79.4	87.5	90.9	90.9
97.5°	110.5	119.7	128.9	133.5	133.5
100°	161.2	165.8	176.1	178.4	178.4
102.5°	214.1	215.3	224.5	227.9	229.1
105°	268.2	269.4	274.0	277.4	280.9
107.5°	324.6	325.8	326.9	331.5	330.4
110°	382.2	384.5	383.3	381.0	384.5

TEST NUMBER: P1024856

CATALOG NUMBER: S124DIP-B1020D1205UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.0	442.0	439.7	439.7	439.7
115°	501.9	501.9	499.6	498.4	497.3
117.5°	558.3	558.3	557.2	553.7	550.2
120°	614.7	619.3	615.9	610.1	612.4
122.5°	673.4	674.6	673.4	670.0	664.2
125°	731.0	731.0	729.8	727.5	725.2
127.5°	782.8	786.2	783.9	781.6	780.5
130°	838.0	841.5	841.5	839.2	834.6
132.5°	894.4	896.7	895.6	893.3	892.1
135°	942.8	949.7	949.7	947.4	943.9
137.5°	996.9	1000.3	1002.6	999.2	1000.3
140°	1051.0	1053.3	1053.3	1052.1	1051.0
142.5°	1100.5	1102.8	1101.6	1101.6	1101.6
145°	1145.4	1150.0	1151.1	1150.0	1146.5
147.5°	1191.4	1197.2	1196.0	1194.9	1193.7
150°	1232.9	1237.5	1237.5	1237.5	1236.3
152.5°	1272.0	1274.3	1275.5	1278.9	1275.5
155°	1312.3	1312.3	1311.1	1315.7	1311.1
157.5°	1346.8	1344.5	1344.5	1348.0	1344.5
160°	1376.8	1375.6	1374.5	1377.9	1372.2
162.5°	1404.4	1400.9	1399.8	1406.7	1400.9
165°	1428.6	1425.1	1422.8	1429.7	1425.1
167.5°	1448.1	1443.5	1443.5	1450.4	1443.5
170°	1464.2	1458.5	1459.6	1466.5	1458.5
172.5°	1475.8	1471.2	1471.2	1479.2	1471.2
175°	1486.1	1480.4	1479.2	1487.3	1479.2
177.5°	1490.7	1485.0	1485.0	1493.0	1483.8
180°	1488.4	1488.4	1488.4	1488.4	1488.4

(END OF REPORT)