

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: P1025963

Luminaire Tested: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025963
REPORT IS A COMBINATION OF REPORTS P998863 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B1020D1205UB27-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

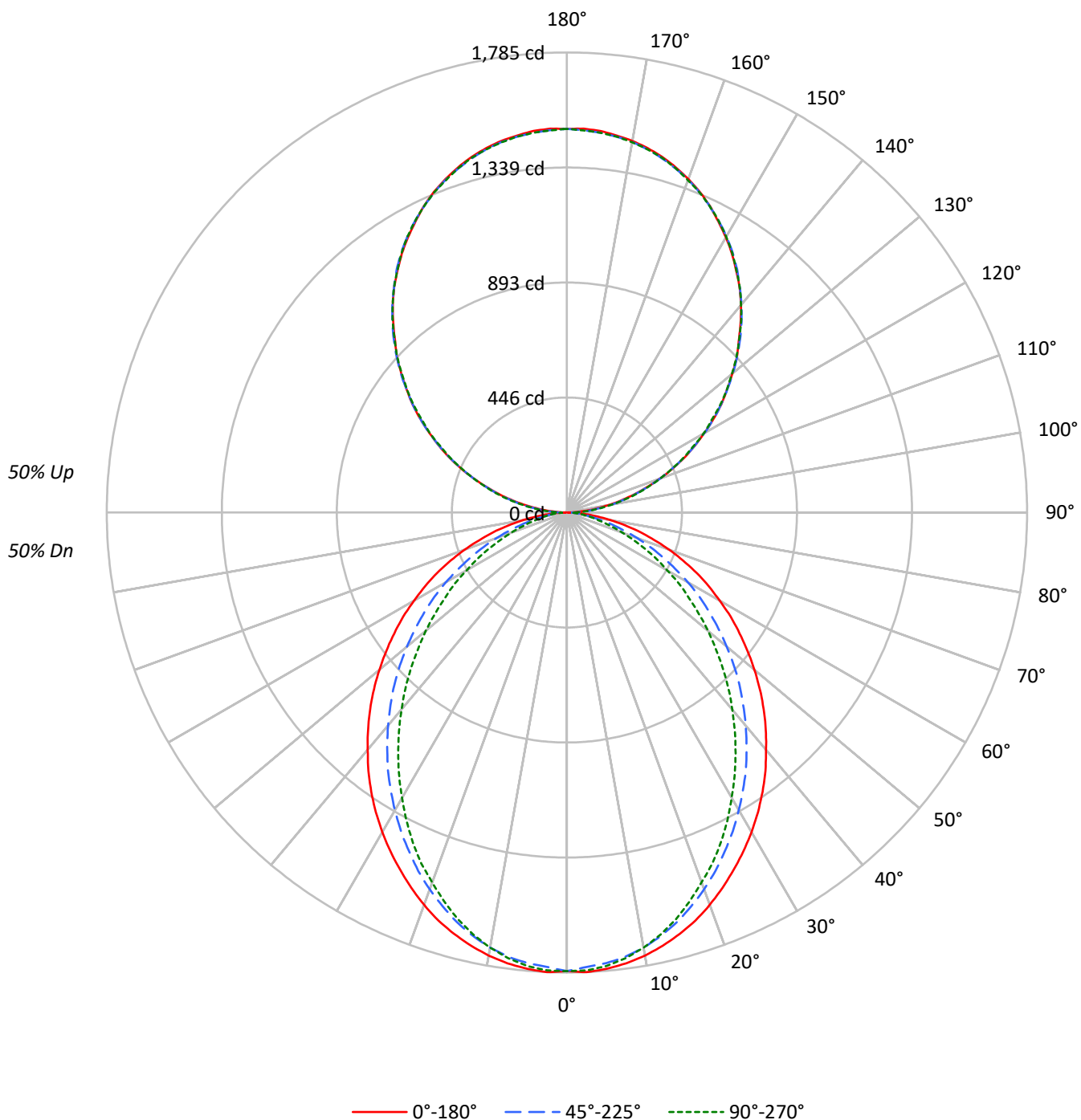
Lumens per Lamp: N/A
Luminaire Lumens: 8245.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56
1	98	94	90	87	90	87	83	81	73	71	69		61	60	58		50
2	89	82	76	71	82	76	71	67	65	61	58		54	51	49		44
3	82	72	65	60	75	67	61	56	57	53	49		48	45	42		39
4	75	64	57	51	69	60	53	48	51	46	42		43	39	36		35
5	69	57	49	43	63	53	46	41	46	40	36		39	34	31		32
6	63	52	44	38	58	48	41	36	41	36	32		35	31	27		29
7	59	47	39	33	54	43	36	31	37	32	28		32	28	24		27
8	55	42	35	29	50	40	33	28	34	29	25		29	25	22		25
9	51	39	31	26	47	36	30	25	31	26	22		27	23	20		23
10	48	36	28	24	44	33	27	22	29	24	20		25	21	18		21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14512	14512	14512
5°	14513	14081	14082
10°	14391	13636	13474
15°	14192	13083	12757
20°	13933	12452	11939
25°	13610	11772	11140
30°	13293	11077	10243
35°	12945	10374	9366
40°	12531	9616	8466
45°	12142	8865	7573
50°	11701	8044	6668
55°	11223	7203	5733
60°	10692	6309	4810
65°	10182	5286	3920
70°	9455	4207	2996
75°	8521	3060	2095
80°	7119	1880	1506
85°	5356	1081	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	2.0
10°-20°	466.6	5.7
20°-30°	673.6	8.2
30°-40°	763.5	9.3
40°-50°	737.1	8.9
50°-60°	612.8	7.4
60°-70°	423.0	5.1
70°-80°	213.7	2.6
80°-90°	57.4	0.7
90°-100°	97.0	1.2
100°-110°	290.6	3.5
110°-120°	493.7	6.0
120°-130°	651.1	7.9
130°-140°	731.2	8.9
140°-150°	718.7	8.7
150°-160°	604.5	7.3
160°-170°	402.2	4.9
170°-180°	140.8	1.7
0°-30°	1307.6	15.9
0°-40°	2071.0	25.1
0°-60°	3421.0	41.5
0°-90°	4115.2	49.9
90°-120°	881.3	10.7
90°-150°	2982.3	36.2
90°-180°	4130.0	50.1
0°-180°	8245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1777	1771	1755	1769	1766	169
15°	1692	1680	1646	1643	1634	477
25°	1530	1506	1450	1427	1413	705
35°	1323	1280	1211	1165	1140	827
45°	1079	1029	947	880	856	832
55°	818	763	674	604	578	731
65°	556	497	410	352	335	549
75°	296	245	181	150	142	312
85°	74	46	42	40	40	81
90°	4	16	25	32	34	9
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1779.6	1779.6	1779.6	1779.6	1779.6
2.5°	1785.1	1779.6	1764.6	1779.6	1778.3
5°	1776.9	1771.4	1755.1	1768.7	1766.0
7.5°	1764.6	1759.2	1738.7	1748.3	1744.2
10°	1745.6	1738.7	1714.2	1719.7	1714.2
12.5°	1721.0	1712.8	1682.9	1685.6	1677.4
15°	1692.4	1680.1	1646.1	1643.4	1633.8
17.5°	1659.7	1642.0	1602.5	1595.7	1582.0
20°	1620.2	1602.5	1556.1	1545.2	1527.5
22.5°	1576.6	1556.1	1505.7	1488.0	1474.4
25°	1530.3	1505.7	1449.9	1426.7	1413.1
27.5°	1482.6	1452.6	1394.0	1366.7	1347.7
30°	1432.1	1398.1	1334.0	1300.0	1278.2
32.5°	1379.0	1339.5	1272.7	1231.8	1211.4
35°	1323.1	1279.5	1211.4	1165.1	1140.5
37.5°	1264.5	1219.6	1144.6	1094.2	1069.7
40°	1201.9	1156.9	1079.2	1022.0	997.5
42.5°	1141.9	1094.2	1012.4	953.9	928.0
45°	1079.2	1028.8	947.0	880.3	855.7
47.5°	1015.2	963.4	878.9	809.4	782.2
50°	949.8	896.6	809.4	741.3	715.4
52.5°	883.0	831.2	741.3	671.8	644.5
55°	817.6	763.1	674.5	603.7	577.8
57.5°	753.5	696.3	609.1	536.9	517.8
60°	684.0	629.5	542.3	471.5	449.7
62.5°	621.4	564.1	474.2	410.2	393.8
65°	556.0	497.4	410.2	351.6	335.2
67.5°	487.8	432.0	350.2	298.4	279.3
70°	423.8	366.6	288.9	243.9	230.3
72.5°	355.7	305.2	233.0	196.2	184.0
75°	295.7	245.3	181.2	149.9	141.7
77.5°	233.0	189.4	134.9	113.1	110.4
80°	173.1	133.5	92.7	88.6	87.2
82.5°	121.3	85.8	66.8	64.0	62.7
85°	73.6	46.3	42.2	39.5	39.5
87.5°	31.3	20.4	19.1	17.7	19.1
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

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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)