

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: P1012311

Luminaire Tested: S123RDIP-B1165D1195UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012311
REPORT IS A COMBINATION OF REPORTS P992990 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D1195UB40-4F0-XX-W2A-F
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

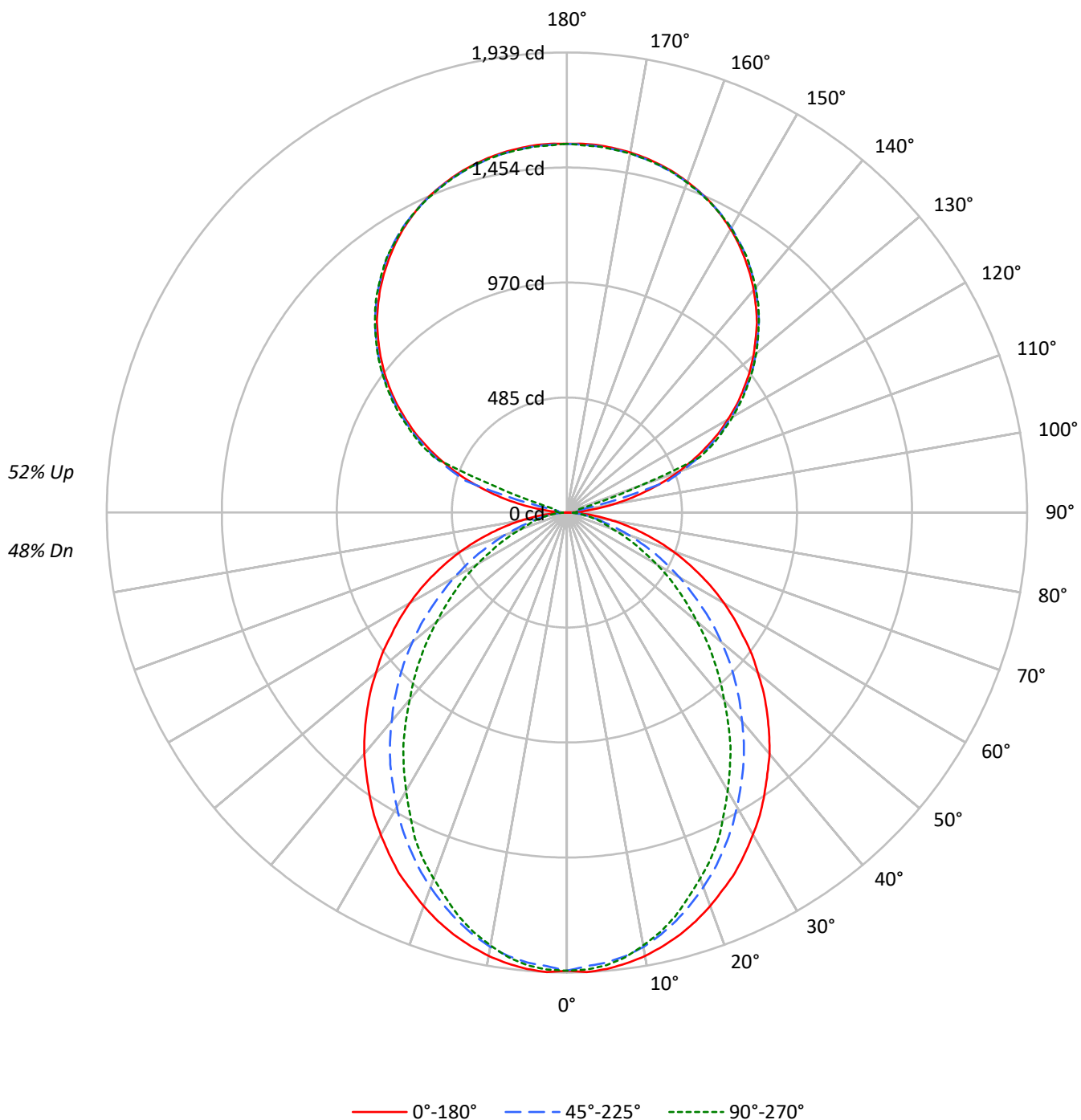
Lumens per Lamp: N/A
Luminaire Lumens: 9103.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 96.3
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

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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	30	10
RCR																	
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	98	93	90	86	90	86	83	80	73	70	68	60	58	57	48	47	46
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	43	41	40
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	38	36	34
4	75	64	56	51	69	59	53	47	50	45	41	42	38	35	34	32	30
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26
6	63	51	44	38	58	48	41	36	41	35	31	34	30	27	28	25	23
7	59	47	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	18
9	51	39	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17
10	47	35	28	24	44	33	27	22	29	24	20	25	20	18	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.0
10°-20°	505.0	5.5
20°-30°	727.2	8.0
30°-40°	818.9	9.0
40°-50°	783.3	8.6
50°-60°	641.2	7.0
60°-70°	432.3	4.7
70°-80°	216.8	2.4
80°-90°	59.8	0.7
90°-100°	54.8	0.6
100°-110°	264.9	2.9
110°-120°	649.2	7.1
120°-130°	824.1	9.1
130°-140°	880.4	9.7
140°-150°	823.3	9.0
150°-160°	664.0	7.3
160°-170°	428.5	4.7
170°-180°	147.7	1.6
0°-30°	1413.8	15.5
0°-40°	2232.6	24.5
0°-60°	3657.2	40.2
0°-90°	4366.1	48.0
90°-120°	968.9	10.6
90°-150°	3496.7	38.4
90°-180°	4737.0	52.0
0°-180°	9103.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	1	13	28	32	35	9
95°	70	23	36	44	44	84
105°	344	357	253	48	51	365
115°	645	652	663	674	679	637
125°	910	919	924	926	928	813
135°	1132	1139	1144	1148	1144	872
145°	1307	1315	1317	1320	1320	818
155°	1440	1437	1438	1444	1437	663
165°	1518	1515	1513	1523	1515	429
175°	1554	1548	1549	1557	1548	148
180°	1554	1554	1554	1554	1554	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	1.2	12.7	27.7	32.3	34.6
92.5°	26.6	19.6	30.0	38.1	39.2
95°	70.4	23.1	35.8	43.9	43.9
97.5°	128.1	95.8	36.9	46.2	47.3
100°	195.1	218.2	38.1	47.3	48.5
102.5°	271.3	286.3	85.4	47.3	49.6
105°	344.0	356.7	252.8	48.5	50.8
107.5°	421.4	431.7	449.1	271.3	120.1
110°	498.7	507.9	520.6	482.5	317.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	572.6	580.7	593.4	603.7	601.4
115°	645.3	652.2	662.6	674.2	678.8
117.5°	716.9	725.0	730.7	740.0	741.1
120°	782.7	793.1	796.5	805.8	805.8
122.5°	849.6	857.7	862.3	868.1	869.3
125°	909.7	918.9	923.5	925.8	928.1
127.5°	969.7	978.9	984.7	988.2	985.8
130°	1025.1	1034.3	1038.9	1043.6	1041.3
132.5°	1078.2	1087.4	1090.9	1095.5	1092.0
135°	1132.5	1139.4	1144.0	1147.5	1144.0
137.5°	1178.6	1187.9	1190.2	1195.9	1193.6
140°	1224.8	1231.7	1235.2	1239.8	1237.5
142.5°	1267.5	1274.4	1277.9	1281.4	1277.9
145°	1306.8	1314.8	1317.2	1319.5	1319.5
147.5°	1344.9	1350.6	1352.9	1355.2	1349.5
150°	1379.5	1383.0	1385.3	1387.6	1384.1
152.5°	1410.7	1411.8	1413.0	1417.6	1411.8
155°	1439.5	1437.2	1438.4	1444.1	1437.2
157.5°	1462.6	1462.6	1461.5	1468.4	1459.1
160°	1483.4	1482.2	1481.1	1488.0	1479.9
162.5°	1503.0	1499.5	1498.4	1506.5	1499.5
165°	1518.0	1514.6	1513.4	1522.6	1514.6
167.5°	1530.7	1526.1	1526.1	1535.3	1526.1
170°	1541.1	1536.5	1536.5	1545.7	1536.5
172.5°	1548.0	1542.3	1543.4	1552.6	1542.3
175°	1553.8	1548.0	1549.2	1557.3	1548.0
177.5°	1556.1	1550.3	1551.5	1560.7	1549.2
180°	1553.8	1553.8	1553.8	1553.8	1553.8

(END OF REPORT)