

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: P1012281

Luminaire Tested: S123RDIP-B1165D1025UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012281
REPORT IS A COMBINATION OF REPORTS P992950 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D1025UB40-4F0-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

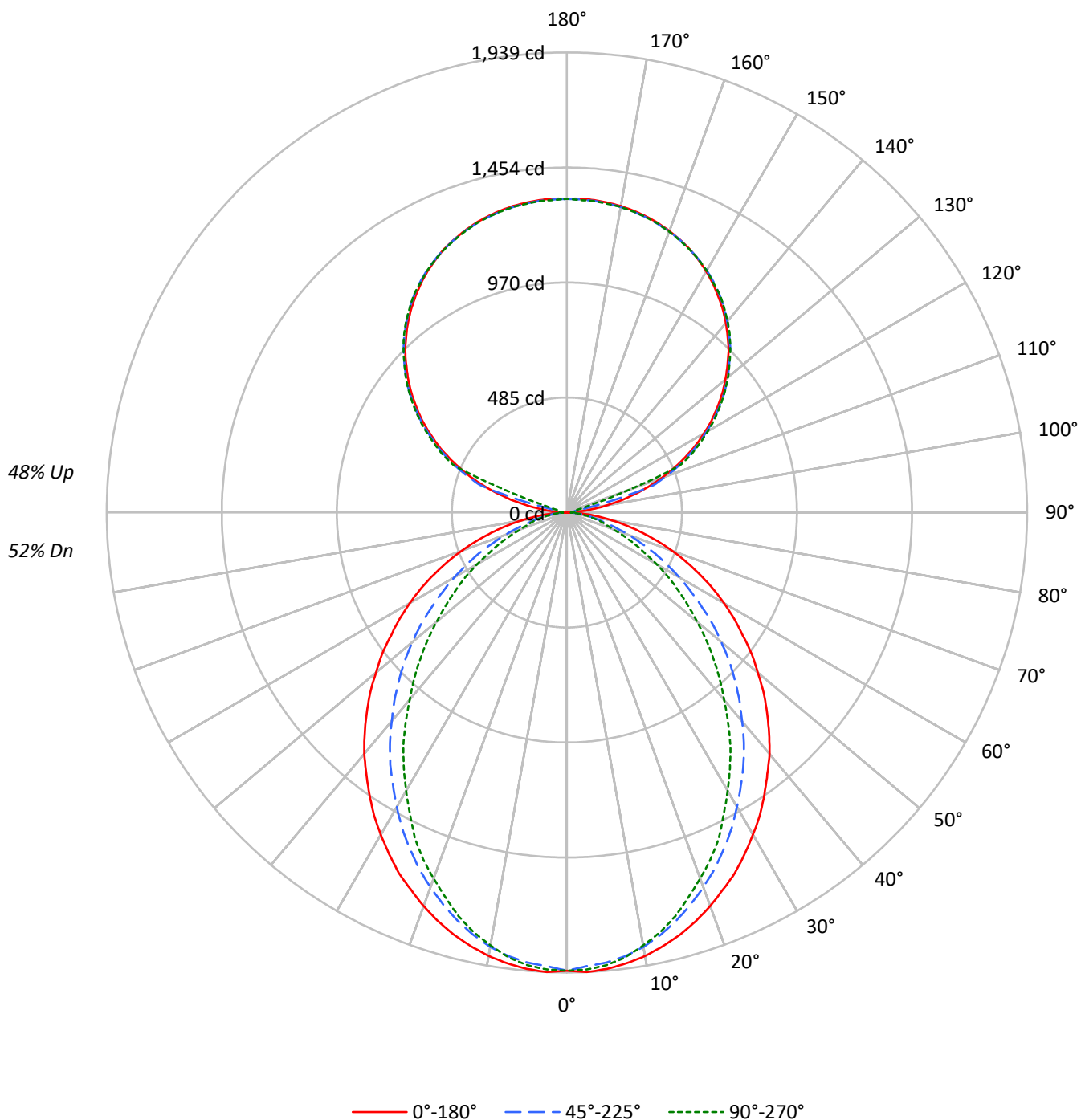
Lumens per Lamp: N/A
Luminaire Lumens: 8397.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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	30	10
RCR																	
0	108	108	108	108	100	100	100	100	84	84	84	71	71	71	58	58	58
1	99	94	91	87	91	87	84	81	75	72	70	63	61	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	55	53	50	46	44	42
3	82	73	66	60	76	68	62	57	58	54	50	49	46	43	41	39	36
4	75	65	57	51	70	60	54	48	52	47	43	44	40	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	33	30	28
6	64	52	44	38	59	49	42	36	42	37	32	36	32	28	30	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	24	22
8	55	43	35	30	51	40	33	28	35	29	26	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	23	20	24	20	18
10	48	36	29	24	44	34	27	23	30	24	21	26	21	19	22	19	16

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	2.2
10°-20°	505.0	6.0
20°-30°	727.2	8.7
30°-40°	818.9	9.8
40°-50°	783.3	9.3
50°-60°	641.2	7.6
60°-70°	432.3	5.1
70°-80°	216.8	2.6
80°-90°	59.3	0.7
90°-100°	46.6	0.6
100°-110°	225.5	2.7
110°-120°	552.5	6.6
120°-130°	701.4	8.4
130°-140°	749.3	8.9
140°-150°	700.6	8.3
150°-160°	565.1	6.7
160°-170°	364.7	4.3
170°-180°	125.7	1.5
0°-30°	1413.8	16.8
0°-40°	2232.6	26.6
0°-60°	3657.2	43.6
0°-90°	4365.7	52.0
90°-120°	824.6	9.8
90°-150°	2975.8	35.4
90°-180°	4031.0	48.0
0°-180°	8397.0	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	11	24	28	30	9
95°	60	20	30	37	37	72
105°	293	304	215	41	43	310
115°	549	555	564	574	578	542
125°	774	782	786	788	790	692
135°	964	970	974	977	974	742
145°	1112	1119	1121	1123	1123	696
155°	1225	1223	1224	1229	1223	564
165°	1292	1289	1288	1296	1289	365
175°	1322	1318	1318	1325	1318	126
180°	1322	1322	1322	1322	1322	

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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°	1.0	10.8	23.6	27.5	29.5
92.5°	22.6	16.7	25.5	32.4	33.4
95°	59.9	19.6	30.5	37.3	37.3
97.5°	109.1	81.5	31.4	39.3	40.3
100°	166.0	185.7	32.4	40.3	41.3
102.5°	230.9	243.6	72.7	40.3	42.2
105°	292.8	303.6	215.2	41.3	43.2
107.5°	358.6	367.4	382.2	230.9	102.2
110°	424.4	432.3	443.1	410.7	270.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	487.3	494.2	505.0	513.8	511.9
115°	549.2	555.1	563.9	573.7	577.7
117.5°	610.1	617.0	621.9	629.7	630.7
120°	666.1	674.9	677.9	685.7	685.7
122.5°	723.1	730.0	733.9	738.8	739.8
125°	774.2	782.0	786.0	787.9	789.9
127.5°	825.3	833.1	838.0	841.0	839.0
130°	872.4	880.3	884.2	888.1	886.2
132.5°	917.6	925.5	928.4	932.3	929.4
135°	963.8	969.7	973.6	976.6	973.6
137.5°	1003.1	1010.9	1012.9	1017.8	1015.8
140°	1042.4	1048.3	1051.2	1055.1	1053.2
142.5°	1078.7	1084.6	1087.6	1090.5	1087.6
145°	1112.1	1119.0	1121.0	1122.9	1122.9
147.5°	1144.5	1149.5	1151.4	1153.4	1148.5
150°	1174.0	1177.0	1178.9	1180.9	1178.0
152.5°	1200.5	1201.5	1202.5	1206.4	1201.5
155°	1225.1	1223.1	1224.1	1229.0	1223.1
157.5°	1244.8	1244.8	1243.8	1249.7	1241.8
160°	1262.4	1261.5	1260.5	1266.4	1259.5
162.5°	1279.1	1276.2	1275.2	1282.1	1276.2
165°	1291.9	1289.0	1288.0	1295.8	1289.0
167.5°	1302.7	1298.8	1298.8	1306.7	1298.8
170°	1311.6	1307.6	1307.6	1315.5	1307.6
172.5°	1317.5	1312.5	1313.5	1321.4	1312.5
175°	1322.4	1317.5	1318.4	1325.3	1317.5
177.5°	1324.3	1319.4	1320.4	1328.3	1318.4
180°	1322.4	1322.4	1322.4	1322.4	1322.4

(END OF REPORT)