

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: P1012312

Luminaire Tested: S123RDIP-B1165D1195UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012312
REPORT IS A COMBINATION OF REPORTS P992991 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-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

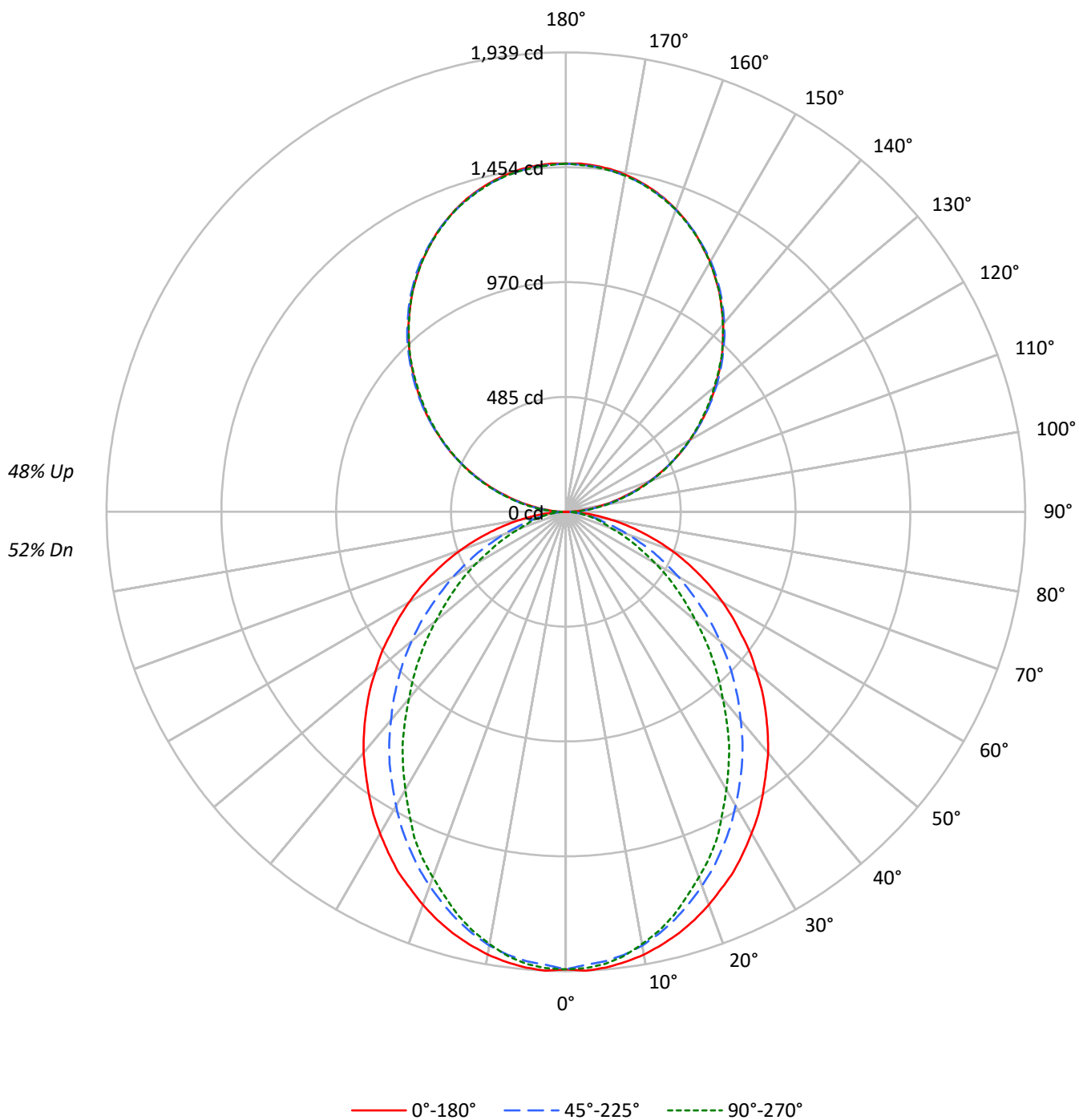
Lumens per Lamp: N/A
Luminaire Lumens: 8438.0 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58
1	99	94	91	87	91	87	84	81	74	72	70	63	61	59	52	50	49	49	49	44
2	90	83	77	72	83	77	72	67	66	62	58	55	53	50	46	44	42	42	42	38
3	82	73	66	60	76	68	62	57	58	53	50	49	46	43	41	38	36	36	36	32
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	31	31	31	28
5	69	58	50	44	64	54	47	42	47	41	37	40	35	32	33	30	28	28	28	24
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	30	27	24	24	24	22
7	59	47	39	34	55	44	37	32	38	33	29	33	28	25	28	24	22	22	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	25	22	20	20	20	17
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	24	20	18	18	18	16
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	19	16	16	16	14

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	8.6
30°-40°	818.9	9.7
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°	59.8	0.7
90°-100°	94.6	1.1
100°-110°	286.3	3.4
110°-120°	487.4	5.8
120°-130°	641.3	7.6
130°-140°	720.8	8.5
140°-150°	708.6	8.4
150°-160°	596.6	7.1
160°-170°	397.2	4.7
170°-180°	139.1	1.6
0°-30°	1413.8	16.8
0°-40°	2232.6	26.5
0°-60°	3657.2	43.3
0°-90°	4366.1	51.7
90°-120°	868.4	10.3
90°-150°	2939.0	34.8
90°-180°	4072.0	48.3
0°-180°	8438.0	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	10
95°	68	76	85	90	90	75
105°	260	262	272	272	275	278
115°	491	494	492	493	492	486
125°	718	722	719	715	710	640
135°	932	938	937	933	930	718
145°	1130	1132	1136	1135	1130	706
155°	1294	1294	1295	1300	1292	596
165°	1410	1406	1406	1413	1405	398
175°	1466	1462	1462	1468	1460	139
180°	1470	1470	1470	1470	1470	

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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°	34.6	41.6	48.5	51.9	49.6
95°	68.1	76.2	85.4	90.0	90.0
97.5°	112.0	117.7	124.7	130.4	129.3
100°	157.0	163.9	169.7	173.2	175.5
102.5°	208.9	212.4	220.5	224.0	222.8
105°	259.7	262.1	272.4	272.4	274.7
107.5°	319.8	320.9	325.5	329.0	327.9
110°	375.2	377.5	379.8	384.4	382.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	432.9	434.1	434.1	439.8	439.8
115°	490.6	494.1	491.8	492.9	491.8
117.5°	549.5	550.7	548.3	548.3	544.9
120°	603.8	610.7	604.9	603.8	601.4
122.5°	660.3	664.9	662.6	659.2	655.7
125°	718.0	721.5	719.2	714.6	710.0
127.5°	771.1	778.1	775.8	768.8	764.2
130°	824.2	833.5	830.0	825.4	817.3
132.5°	877.4	886.6	884.3	878.5	872.7
135°	931.6	938.5	937.4	932.8	930.5
137.5°	981.2	987.0	990.5	984.7	981.2
140°	1033.2	1039.0	1040.1	1039.0	1030.9
142.5°	1080.5	1086.3	1088.6	1087.5	1081.7
145°	1130.2	1132.5	1135.9	1134.8	1130.2
147.5°	1172.9	1177.5	1181.0	1181.0	1174.0
150°	1217.9	1220.2	1222.5	1222.5	1215.6
152.5°	1254.8	1258.3	1259.5	1261.8	1256.0
155°	1294.1	1294.1	1295.2	1299.9	1291.8
157.5°	1327.6	1326.4	1327.6	1332.2	1325.3
160°	1358.7	1356.4	1356.4	1362.2	1357.6
162.5°	1386.4	1383.0	1384.1	1389.9	1381.8
165°	1409.5	1406.1	1406.1	1413.0	1404.9
167.5°	1429.2	1424.5	1425.7	1432.6	1425.7
170°	1445.3	1440.7	1440.7	1448.8	1440.7
172.5°	1458.0	1453.4	1453.4	1460.3	1452.2
175°	1466.1	1461.5	1461.5	1468.4	1460.3
177.5°	1470.7	1466.1	1466.1	1473.0	1464.9
180°	1469.6	1469.6	1469.6	1469.6	1469.6

(END OF REPORT)