

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: P1012397

Luminaire Tested: S123RDIP-B1165D805UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012397
REPORT IS A COMBINATION OF REPORTS P993110 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D805UB40-4F0-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

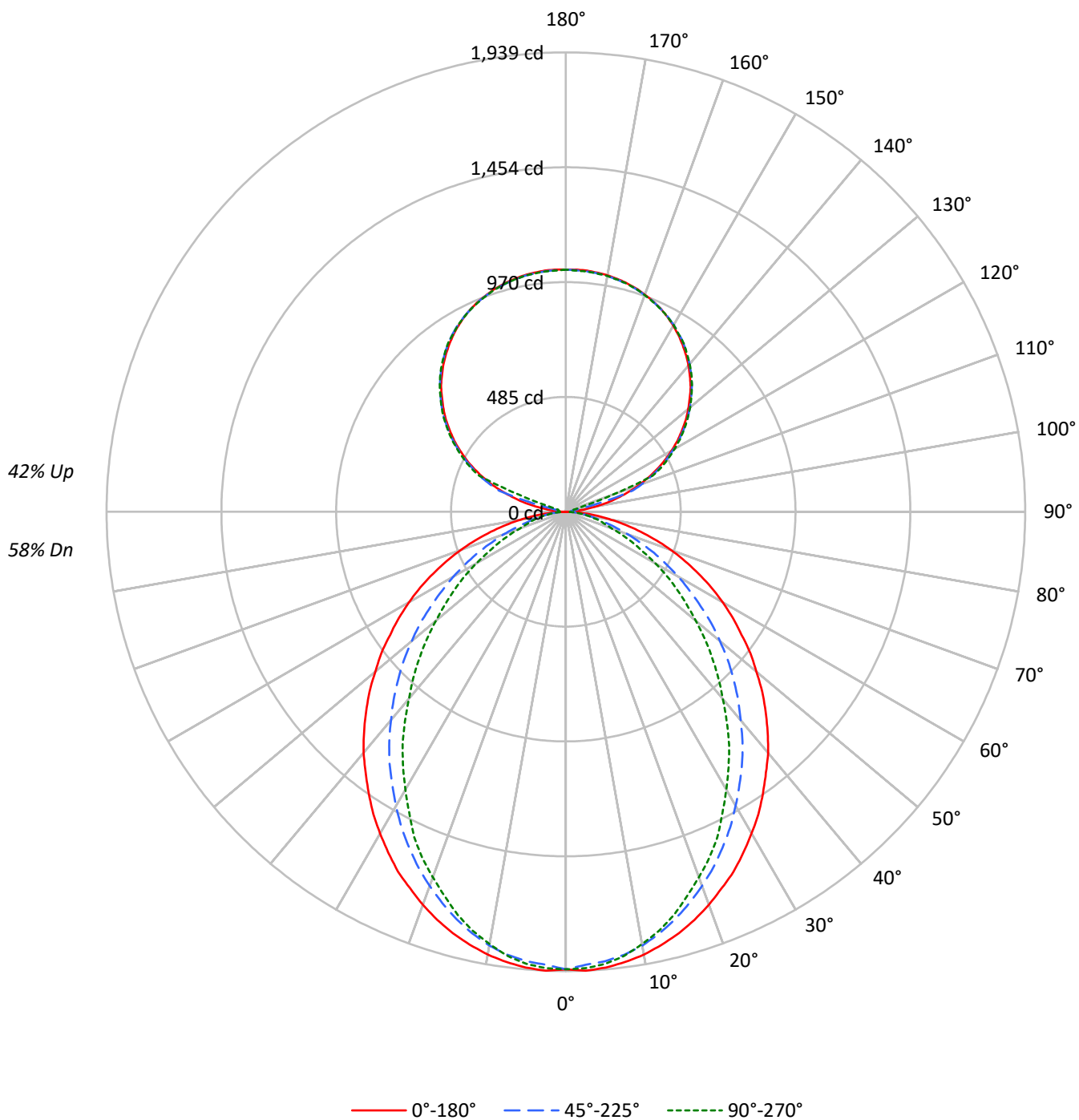
Lumens per Lamp: N/A
Luminaire Lumens: 7480.0 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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: P1012397

CATALOG NUMBER: S123RDIP-B1165D805UB40-4F0-XX-W2A-F

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	100	96	92	89	93	90	86	83	78	75	73	67	65	64	57	56	55
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	42	40
4	77	66	58	52	71	62	55	50	54	49	45	47	43	40	41	37	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27
7	60	48	40	35	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	31	52	41	34	29	37	31	27	32	28	24	28	25	22
9	52	40	33	28	49	38	31	26	34	28	24	30	25	22	26	22	20
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	24	21	18

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

TEST NUMBER: P1012397

CATALOG NUMBER: S123RDIP-B1165D805UB40-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.4
10°-20°	505.0	6.8
20°-30°	727.2	9.7
30°-40°	818.9	10.9
40°-50°	783.3	10.5
50°-60°	641.2	8.6
60°-70°	432.3	5.8
70°-80°	216.8	2.9
80°-90°	58.7	0.8
90°-100°	36.0	0.5
100°-110°	174.2	2.3
110°-120°	426.9	5.7
120°-130°	541.9	7.2
130°-140°	578.9	7.7
140°-150°	541.4	7.2
150°-160°	436.7	5.8
160°-170°	281.8	3.8
170°-180°	97.1	1.3
0°-30°	1413.8	18.9
0°-40°	2232.6	29.8
0°-60°	3657.2	48.9
0°-90°	4365.1	58.4
90°-120°	637.1	8.5
90°-150°	2299.4	30.7
90°-180°	3115.0	41.6
0°-180°	7480.0	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	8	18	21	23	8
95°	46	15	24	29	29	55
105°	226	235	166	32	33	240
115°	424	429	436	443	446	419
125°	598	604	607	609	610	534
135°	745	749	752	755	752	573
145°	859	865	866	868	868	538
155°	947	945	946	950	945	436
165°	998	996	995	1001	996	282
175°	1022	1018	1019	1024	1018	97
180°	1022	1022	1022	1022	1022	

TEST NUMBER: P1012397

CATALOG NUMBER: S123RDIP-B1165D805UB40-4F0-XX-W2A-F

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°	0.8	8.4	18.2	21.3	22.8
92.5°	17.5	12.9	19.7	25.1	25.8
95°	46.3	15.2	23.5	28.8	28.8
97.5°	84.3	63.0	24.3	30.4	31.1
100°	128.3	143.5	25.1	31.1	31.9
102.5°	178.4	188.3	56.2	31.1	32.6
105°	226.2	234.6	166.2	31.9	33.4
107.5°	277.1	283.9	295.3	178.4	78.9
110°	327.9	334.0	342.4	317.3	208.8

TEST NUMBER: P1012397

CATALOG NUMBER: S123RDIP-B1165D805UB40-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.5	381.8	390.2	397.0	395.5
115°	424.3	428.9	435.7	443.3	446.4
117.5°	471.4	476.7	480.5	486.6	487.4
120°	514.7	521.5	523.8	529.9	529.9
122.5°	558.7	564.0	567.1	570.9	571.6
125°	598.2	604.3	607.3	608.8	610.3
127.5°	637.7	643.7	647.5	649.8	648.3
130°	674.1	680.2	683.2	686.2	684.7
132.5°	709.0	715.1	717.4	720.4	718.1
135°	744.7	749.2	752.3	754.6	752.3
137.5°	775.1	781.1	782.7	786.4	784.9
140°	805.4	810.0	812.3	815.3	813.8
142.5°	833.5	838.1	840.3	842.6	840.3
145°	859.3	864.6	866.2	867.7	867.7
147.5°	884.4	888.2	889.7	891.2	887.4
150°	907.1	909.4	910.9	912.5	910.2
152.5°	927.6	928.4	929.2	932.2	928.4
155°	946.6	945.1	945.9	949.7	945.1
157.5°	961.8	961.8	961.0	965.6	959.5
160°	975.5	974.7	973.9	978.5	973.2
162.5°	988.4	986.1	985.3	990.6	986.1
165°	998.2	996.0	995.2	1001.3	996.0
167.5°	1006.6	1003.6	1003.6	1009.6	1003.6
170°	1013.4	1010.4	1010.4	1016.5	1010.4
172.5°	1018.0	1014.2	1014.9	1021.0	1014.2
175°	1021.8	1018.0	1018.7	1024.0	1018.0
177.5°	1023.3	1019.5	1020.3	1026.3	1018.7
180°	1021.8	1021.8	1021.8	1021.8	1021.8

(END OF REPORT)