

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: P1012371

Luminaire Tested: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012371
REPORT IS A COMBINATION OF REPORTS P993072 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

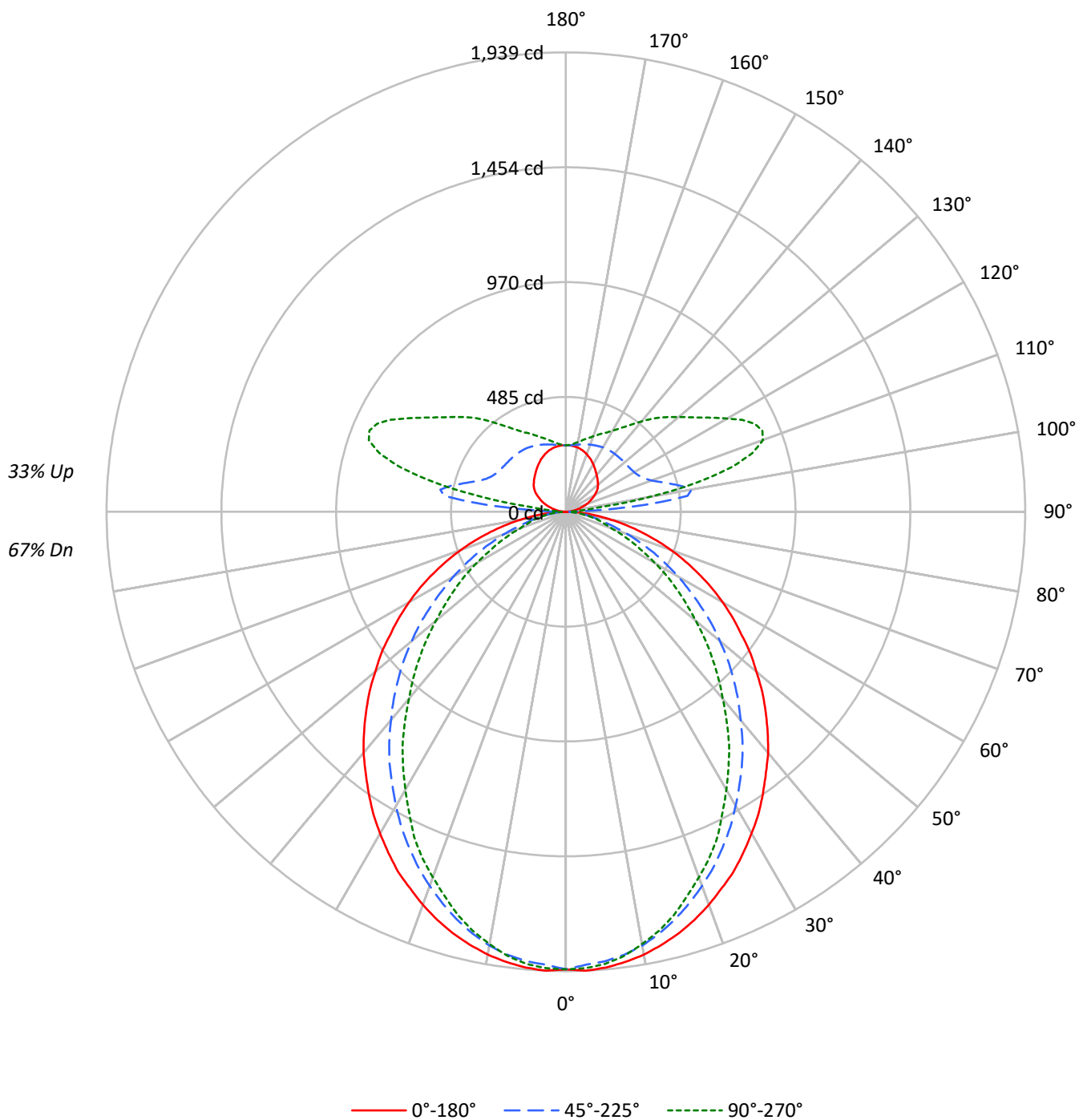
Lumens per Lamp: N/A
Luminaire Lumens: 6480.9 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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: P1012371

CATALOG NUMBER: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1012371

CATALOG NUMBER: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67		
1	102	98	94	91	96	92	89	86	82	80	77	73	71	69	64	63	62	58		
2	93	86	80	75	88	81	76	71	73	68	65	65	61	59	57	55	53	49		
3	85	76	69	63	80	72	65	60	64	59	55	58	54	50	51	48	45	42		
4	78	68	60	54	74	64	57	51	58	52	47	52	47	43	46	42	39	36		
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35	32		
6	67	55	46	41	63	52	44	39	47	41	36	42	37	33	38	34	31	28		
7	62	49	41	36	58	47	40	35	43	37	32	39	34	30	35	31	27	25		
8	58	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	23		
9	54	41	34	29	51	40	33	28	36	30	26	33	28	24	30	25	22	20		
10	50	38	31	26	48	36	30	25	33	28	24	30	25	22	28	23	20	19		

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: P1012371

CATALOG NUMBER: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.8
10°-20°	505.0	7.8
20°-30°	727.2	11.2
30°-40°	818.9	12.6
40°-50°	783.3	12.1
50°-60°	641.2	9.9
60°-70°	432.3	6.7
70°-80°	216.8	3.3
80°-90°	58.3	0.9
90°-100°	159.5	2.5
100°-110°	445.8	6.9
110°-120°	434.7	6.7
120°-130°	346.2	5.3
130°-140°	273.3	4.2
140°-150°	203.9	3.1
150°-160°	142.2	2.2
160°-170°	83.5	1.3
170°-180°	27.2	0.4
0°-30°	1413.8	21.8
0°-40°	2232.6	34.4
0°-60°	3657.2	56.4
0°-90°	4364.6	67.3
90°-120°	1040.1	16.0
90°-150°	1863.4	28.8
90°-180°	2116.0	32.6
0°-180°	6480.9	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	7	14	16	16	7
95°	19	63	337	98	66	20
105°	66	97	457	799	723	70
115°	116	145	350	766	879	115
125°	162	191	326	591	693	144
135°	190	226	322	487	562	147
145°	216	248	318	399	439	136
155°	246	265	307	349	364	113
165°	269	276	294	312	318	76
175°	280	280	282	286	286	27
180°	281	281	281	281	281	

TEST NUMBER: P1012371

CATALOG NUMBER: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

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°	1.1	6.8	14.2	15.9	16.5
92.5°	8.5	34.1	105.7	36.1	30.1
95°	19.3	62.8	337.0	98.3	65.9
97.5°	30.7	71.9	518.2	247.2	135.2
100°	42.0	79.2	538.1	517.0	356.3
102.5°	54.0	87.8	501.2	692.4	564.2
105°	65.9	97.4	456.8	798.9	722.8
107.5°	78.4	108.8	417.6	845.8	826.2
110°	92.1	120.4	385.3	847.2	885.3

TEST NUMBER: P1012371

CATALOG NUMBER: S123RDIP-B1165D585UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	132.6	363.7	815.1	897.2
115°	116.5	145.2	349.5	766.2	879.0
117.5°	128.4	157.1	339.8	714.0	839.3
120°	140.9	169.0	333.5	664.5	787.0
122.5°	151.7	180.4	329.6	625.6	738.1
125°	161.9	191.2	326.2	591.0	693.2
127.5°	169.9	201.4	324.5	562.6	654.6
130°	177.3	210.6	322.7	536.4	622.8
132.5°	183.0	218.8	322.2	512.0	591.5
135°	189.8	226.4	321.6	486.7	562.0
137.5°	196.0	232.7	320.5	462.8	530.7
140°	202.3	238.4	319.9	439.5	497.8
142.5°	209.1	243.4	318.8	418.2	467.1
145°	216.5	248.0	317.6	399.2	439.2
147.5°	223.9	252.8	315.9	384.4	415.4
150°	231.3	256.8	313.7	371.3	394.9
152.5°	238.7	261.1	310.8	360.0	377.9
155°	246.0	265.4	307.4	349.4	364.2
157.5°	251.7	269.0	304.6	339.2	351.2
160°	258.5	272.2	301.2	329.8	338.7
162.5°	263.7	274.4	297.7	321.0	327.3
165°	268.8	276.4	294.3	312.2	317.6
167.5°	272.7	278.2	290.9	304.5	308.0
170°	276.2	279.0	287.5	297.8	299.5
172.5°	278.4	279.8	284.7	291.8	291.5
175°	280.1	280.4	282.4	286.4	285.8
177.5°	281.3	280.7	280.7	283.0	281.8
180°	280.7	280.7	280.7	280.7	280.7

(END OF REPORT)