

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: P1012343

Luminaire Tested: S123RDIP-B1165D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012343
REPORT IS A COMBINATION OF REPORTS P993032 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB40-4F0-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

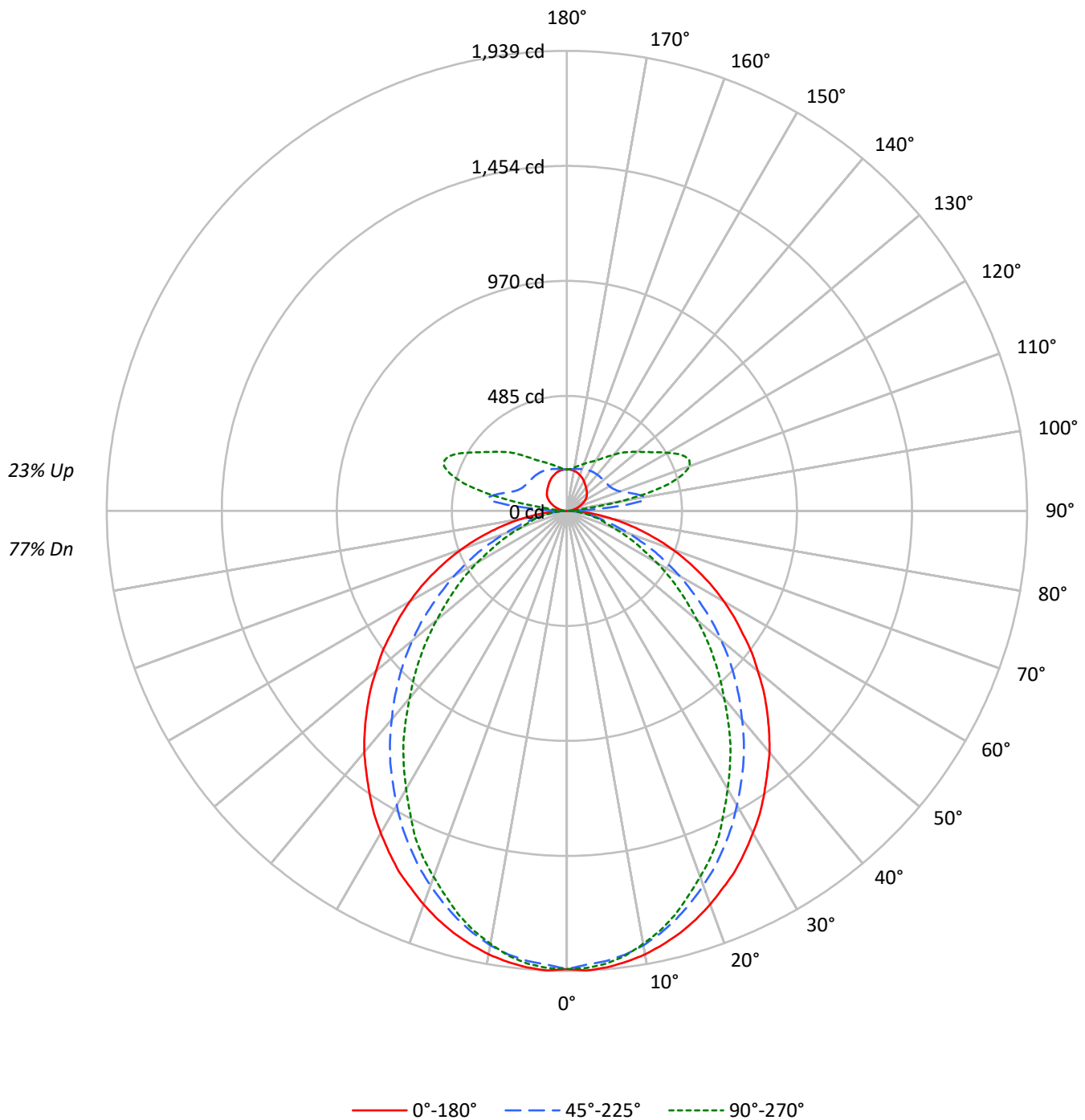
Lumens per Lamp: N/A
Luminaire Lumens: 5681.1 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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: P1012343

CATALOG NUMBER: S123RDIP-B1165D365UB40-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1012343

CATALOG NUMBER: S123RDIP-B1165D365UB40-4F0-XX-W2A-F4

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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81
1	104	100	96	93	99	96	92	89	87	84	82	79	77	75	72	71	69
2	95	88	82	77	91	84	79	74	77	73	69	70	67	64	64	62	59
3	87	78	70	64	83	75	68	62	68	63	58	63	58	55	57	54	51
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	52	48	44
5	74	62	54	48	70	60	52	46	55	49	44	51	45	41	47	42	39
6	68	56	48	42	65	54	46	41	50	43	39	46	41	37	43	38	34
7	64	51	43	37	60	49	42	36	45	39	34	42	37	33	39	34	31
8	59	47	39	33	56	45	37	32	42	35	31	39	33	29	36	31	28
9	55	43	35	30	53	41	34	29	38	32	28	36	30	27	33	29	25
10	52	39	32	27	49	38	31	26	36	30	25	33	28	24	31	26	23

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: P1012343

CATALOG NUMBER: S123RDIP-B1165D365UB40-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.2
10°-20°	505.0	8.9
20°-30°	727.2	12.8
30°-40°	818.9	14.4
40°-50°	783.3	13.8
50°-60°	641.2	11.3
60°-70°	432.3	7.6
70°-80°	216.8	3.8
80°-90°	57.7	1.0
90°-100°	99.3	1.7
100°-110°	277.5	4.9
110°-120°	270.6	4.8
120°-130°	215.4	3.8
130°-140°	170.1	3.0
140°-150°	126.9	2.2
150°-160°	88.5	1.6
160°-170°	52.0	0.9
170°-180°	16.9	0.3
0°-30°	1413.8	24.9
0°-40°	2232.6	39.3
0°-60°	3657.2	64.4
0°-90°	4364.0	76.8
90°-120°	647.3	11.4
90°-150°	1159.7	20.4
90°-180°	1317.0	23.2
0°-180°	5681.1	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	4	9	10	10	6
95°	12	39	210	61	41	13
105°	41	61	284	497	450	44
115°	72	90	218	477	547	72
125°	101	119	203	368	431	90
135°	118	141	200	303	350	91
145°	135	154	198	248	273	84
155°	153	165	191	218	227	70
165°	167	172	183	194	198	47
175°	174	174	176	178	178	17
180°	175	175	175	175	175	

TEST NUMBER: P1012343

CATALOG NUMBER: S123RDIP-B1165D365UB40-4F0-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°	0.7	4.2	8.8	9.9	10.3
92.5°	5.3	21.2	65.8	22.4	18.7
95°	12.0	39.1	209.7	61.2	41.0
97.5°	19.1	44.7	322.5	153.8	84.2
100°	26.2	49.3	334.9	321.8	221.7
102.5°	33.6	54.6	311.9	430.9	351.1
105°	41.0	60.6	284.3	497.2	449.8
107.5°	48.8	67.7	259.9	526.4	514.2
110°	57.3	75.0	239.8	527.2	550.9

TEST NUMBER: P1012343

CATALOG NUMBER: S123RDIP-B1165D365UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.1	82.6	226.3	507.3	558.4
115°	72.5	90.4	217.5	476.8	547.1
117.5°	79.9	97.8	211.5	444.3	522.3
120°	87.7	105.2	207.6	413.6	489.8
122.5°	94.4	112.2	205.1	389.4	459.4
125°	100.8	119.0	203.0	367.8	431.4
127.5°	105.7	125.4	201.9	350.1	407.4
130°	110.3	131.0	200.9	333.8	387.6
132.5°	113.9	136.1	200.5	318.6	368.1
135°	118.1	140.9	200.2	302.9	349.7
137.5°	122.0	144.8	199.4	288.0	330.3
140°	125.9	148.4	199.1	273.5	309.8
142.5°	130.1	151.6	198.4	260.2	290.7
145°	134.7	154.4	197.7	248.4	273.4
147.5°	139.3	157.4	196.6	239.2	258.5
150°	143.9	159.8	195.2	231.1	245.8
152.5°	148.5	162.5	193.4	224.0	235.2
155°	153.1	165.1	191.3	217.5	226.7
157.5°	156.7	167.4	189.5	211.1	218.5
160°	160.9	169.4	187.4	205.2	210.8
162.5°	164.1	170.8	185.3	199.8	203.7
165°	167.3	172.0	183.2	194.3	197.7
167.5°	169.7	173.1	181.1	189.5	191.7
170°	171.9	173.6	178.9	185.3	186.4
172.5°	173.3	174.2	177.2	181.6	181.4
175°	174.3	174.5	175.8	178.2	177.9
177.5°	175.0	174.7	174.7	176.1	175.4
180°	174.7	174.7	174.7	174.7	174.7

(END OF REPORT)