

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: P1012342

Luminaire Tested: S123RDIP-B1165D365UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012342
REPORT IS A COMBINATION OF REPORTS P993031 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-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

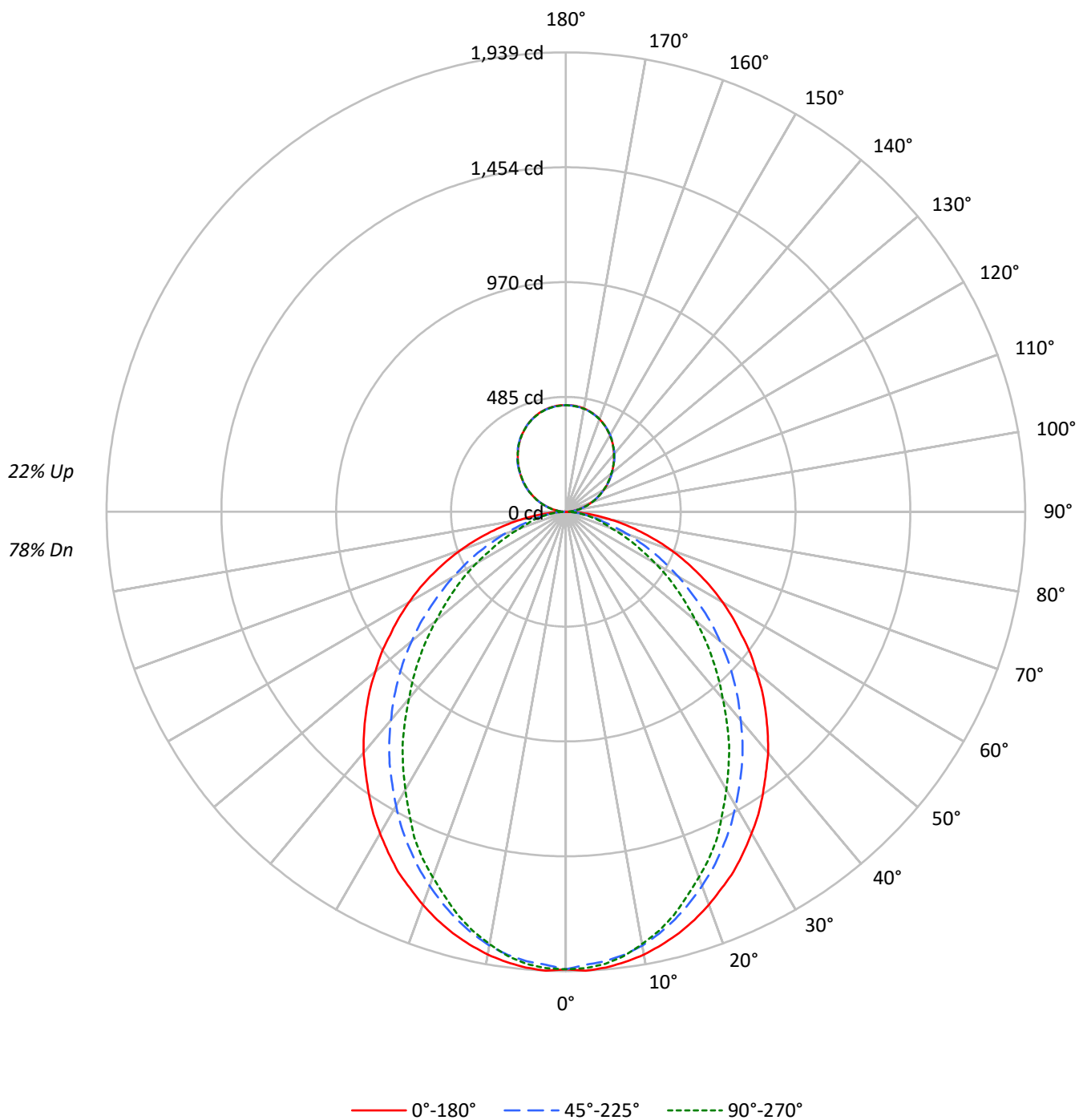
Lumens per Lamp: N/A
Luminaire Lumens: 5611.0 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82
1	105	100	96	93	100	96	92	89	88	85	82	80	78	76	73	71	70
2	96	88	82	77	91	84	79	74	77	73	69	71	67	64	65	62	60
3	88	78	71	65	83	75	68	63	69	63	59	63	59	55	58	54	51
4	80	69	61	55	77	67	59	54	61	55	51	57	52	48	52	48	45
5	74	62	54	48	71	60	52	47	55	49	44	51	46	42	47	43	39
6	69	56	48	42	65	54	47	41	50	44	39	46	41	37	43	38	35
7	64	51	43	37	61	49	42	36	46	39	35	42	37	33	39	35	31
8	59	47	39	33	57	45	38	33	42	36	31	39	34	30	36	32	28
9	55	43	35	30	53	41	34	29	39	32	28	36	31	27	34	29	26
10	52	40	32	27	50	38	31	27	36	30	25	33	28	24	31	27	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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.2
10°-20°	505.0	9.0
20°-30°	727.2	13.0
30°-40°	818.9	14.6
40°-50°	783.3	14.0
50°-60°	641.2	11.4
60°-70°	432.3	7.7
70°-80°	216.8	3.9
80°-90°	57.7	1.0
90°-100°	29.0	0.5
100°-110°	87.7	1.6
110°-120°	149.3	2.7
120°-130°	196.4	3.5
130°-140°	220.7	3.9
140°-150°	217.0	3.9
150°-160°	182.7	3.3
160°-170°	121.6	2.2
170°-180°	42.6	0.8
0°-30°	1413.8	25.2
0°-40°	2232.6	39.8
0°-60°	3657.2	65.2
0°-90°	4364.0	77.8
90°-120°	265.9	4.7
90°-150°	900.1	16.0
90°-180°	1247.0	22.2
0°-180°	5611.0	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°	0	4	8	10	11	7
95°	21	23	26	28	28	23
105°	80	80	83	83	84	85
115°	150	151	151	151	151	149
125°	220	221	220	219	217	196
135°	285	287	287	286	285	220
145°	346	347	348	348	346	216
155°	396	396	397	398	396	182
165°	432	431	431	433	430	122
175°	449	448	448	450	447	43
180°	450	450	450	450	450	

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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°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.9	23.3	26.2	27.6	27.6
97.5°	34.3	36.1	38.2	40.0	39.6
100°	48.1	50.2	52.0	53.0	53.7
102.5°	64.0	65.1	67.5	68.6	68.2
105°	79.5	80.3	83.4	83.4	84.1
107.5°	97.9	98.3	99.7	100.8	100.4
110°	114.9	115.6	116.3	117.7	117.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.6	132.9	132.9	134.7	134.7
115°	150.3	151.3	150.6	151.0	150.6
117.5°	168.3	168.6	167.9	167.9	166.9
120°	184.9	187.0	185.3	184.9	184.2
122.5°	202.2	203.6	202.9	201.9	200.8
125°	219.9	221.0	220.3	218.8	217.4
127.5°	236.2	238.3	237.6	235.5	234.0
130°	252.4	255.3	254.2	252.8	250.3
132.5°	268.7	271.5	270.8	269.0	267.3
135°	285.3	287.4	287.1	285.7	285.0
137.5°	300.5	302.3	303.3	301.6	300.5
140°	316.4	318.2	318.5	318.2	315.7
142.5°	330.9	332.7	333.4	333.0	331.3
145°	346.1	346.8	347.9	347.5	346.1
147.5°	359.2	360.6	361.7	361.7	359.6
150°	373.0	373.7	374.4	374.4	372.3
152.5°	384.3	385.4	385.7	386.4	384.7
155°	396.3	396.3	396.7	398.1	395.6
157.5°	406.6	406.2	406.6	408.0	405.9
160°	416.1	415.4	415.4	417.2	415.8
162.5°	424.6	423.5	423.9	425.7	423.2
165°	431.7	430.6	430.6	432.7	430.3
167.5°	437.7	436.3	436.6	438.8	436.6
170°	442.6	441.2	441.2	443.7	441.2
172.5°	446.5	445.1	445.1	447.2	444.8
175°	449.0	447.6	447.6	449.7	447.2
177.5°	450.4	449.0	449.0	451.1	448.7
180°	450.1	450.1	450.1	450.1	450.1

(END OF REPORT)