

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: P1010847

Luminaire Tested: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010847
REPORT IS A COMBINATION OF REPORTS P993013 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_4000K
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

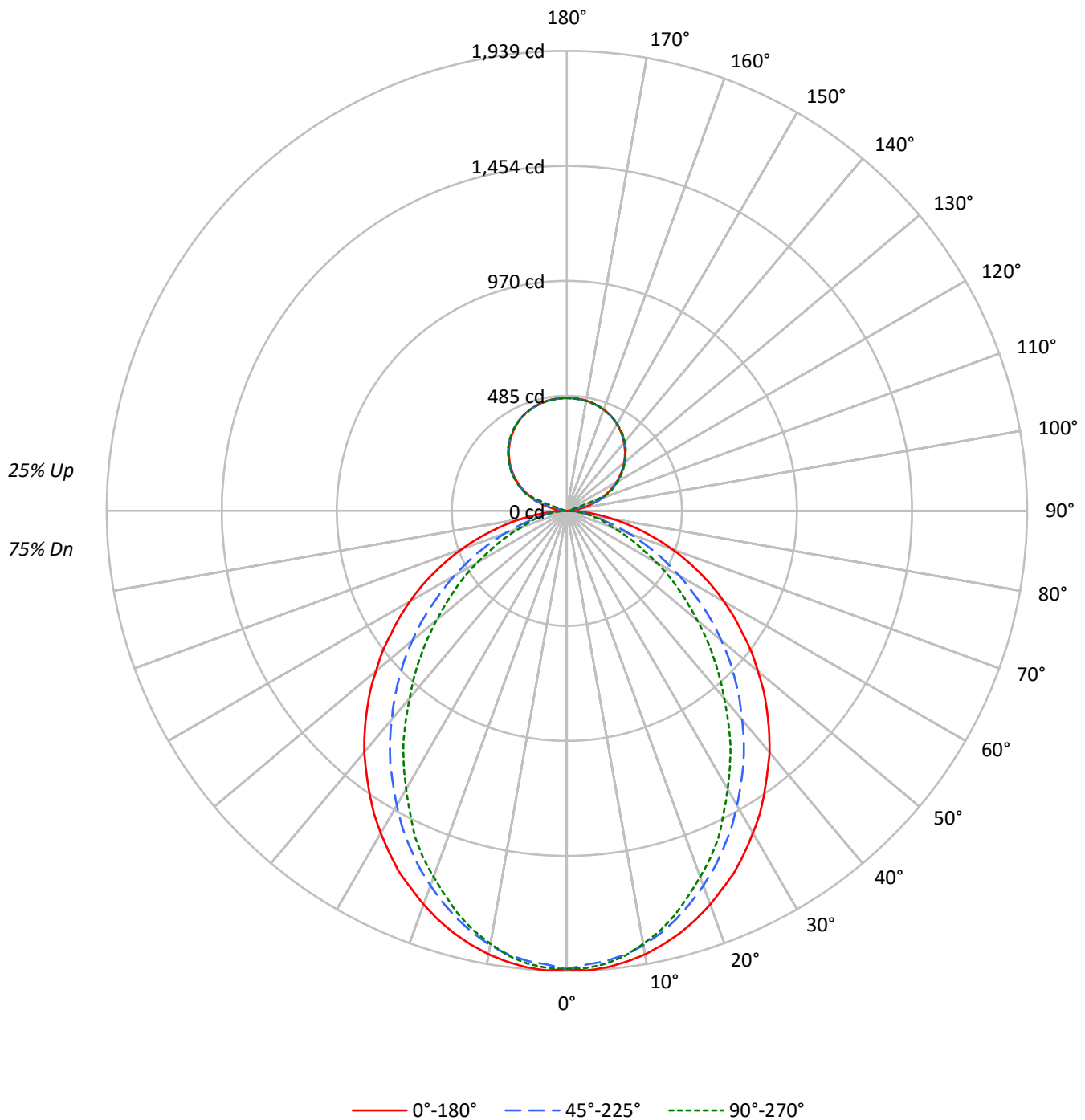
Lumens per Lamp: N/A
Luminaire Lumens: 5814.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75		
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	64		
2	95	88	81	76	90	84	78	73	76	72	68	69	66	63	63	60	58	55		
3	87	77	70	64	83	74	67	62	68	62	58	62	57	54	56	53	50	47		
4	80	69	61	55	76	66	59	53	60	55	50	55	50	47	50	47	43	41		
5	74	62	54	47	70	59	52	46	54	48	43	50	45	41	46	41	38	35		
6	68	56	48	42	65	54	46	40	49	43	38	45	40	36	42	37	34	31		
7	63	51	43	37	60	49	41	36	45	39	34	41	36	32	38	34	30	28		
8	59	46	38	33	56	45	37	32	41	35	30	38	33	29	35	31	27	25		
9	55	42	35	30	52	41	34	29	38	32	27	35	30	26	33	28	25	23		
10	52	39	32	27	49	38	31	26	35	29	25	33	27	24	30	26	23	21		

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	3.1
10°-20°	505.0	8.7
20°-30°	727.2	12.5
30°-40°	818.9	14.1
40°-50°	783.3	13.5
50°-60°	641.2	11.0
60°-70°	432.3	7.4
70°-80°	216.8	3.7
80°-90°	57.7	1.0
90°-100°	16.8	0.3
100°-110°	81.1	1.4
110°-120°	198.7	3.4
120°-130°	252.3	4.3
130°-140°	269.5	4.6
140°-150°	252.0	4.3
150°-160°	203.3	3.5
160°-170°	131.2	2.3
170°-180°	45.2	0.8
0°-30°	1413.8	24.3
0°-40°	2232.6	38.4
0°-60°	3657.2	62.9
0°-90°	4364.0	75.1
90°-120°	296.6	5.1
90°-150°	1070.4	18.4
90°-180°	1450.0	24.9
0°-180°	5814.0	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	6
95°	22	7	11	13	13	26
105°	105	109	77	15	16	112
115°	198	200	203	206	208	195
125°	278	281	283	283	284	249
135°	347	349	350	351	350	267
145°	400	402	403	404	404	250
155°	441	440	440	442	440	203
165°	465	464	463	466	464	131
175°	476	474	474	477	474	45
180°	476	476	476	476	476	

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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°	8.1	6.0	9.2	11.7	12.0
95°	21.6	7.1	11.0	13.4	13.4
97.5°	39.2	29.3	11.3	14.1	14.5
100°	59.7	66.8	11.7	14.5	14.8
102.5°	83.0	87.6	26.1	14.5	15.2
105°	105.3	109.2	77.4	14.8	15.5
107.5°	129.0	132.2	137.5	83.0	36.8
110°	152.7	155.5	159.4	147.7	97.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.3	177.7	181.6	184.8	184.1
115°	197.5	199.7	202.8	206.4	207.8
117.5°	219.4	221.9	223.7	226.5	226.9
120°	239.6	242.8	243.8	246.7	246.7
122.5°	260.1	262.6	264.0	265.7	266.1
125°	278.5	281.3	282.7	283.4	284.1
127.5°	296.8	299.7	301.4	302.5	301.8
130°	313.8	316.6	318.0	319.5	318.7
132.5°	330.1	332.9	333.9	335.4	334.3
135°	346.7	348.8	350.2	351.3	350.2
137.5°	360.8	363.6	364.3	366.1	365.4
140°	374.9	377.1	378.1	379.5	378.8
142.5°	388.0	390.1	391.2	392.2	391.2
145°	400.0	402.5	403.2	403.9	403.9
147.5°	411.7	413.5	414.2	414.9	413.1
150°	422.3	423.3	424.1	424.8	423.7
152.5°	431.8	432.2	432.5	433.9	432.2
155°	440.7	440.0	440.3	442.1	440.0
157.5°	447.7	447.7	447.4	449.5	446.7
160°	454.1	453.7	453.4	455.5	453.0
162.5°	460.1	459.0	458.7	461.2	459.0
165°	464.7	463.6	463.3	466.1	463.6
167.5°	468.6	467.2	467.2	470.0	467.2
170°	471.8	470.3	470.3	473.2	470.3
172.5°	473.9	472.1	472.5	475.3	472.1
175°	475.6	473.9	474.2	476.7	473.9
177.5°	476.4	474.6	474.9	477.8	474.2
180°	475.6	475.6	475.6	475.6	475.6

(END OF REPORT)