

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: P1012404

Luminaire Tested: S123RDIP-B1165D805UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012404
REPORT IS A COMBINATION OF REPORTS P993117 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D805UB50-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

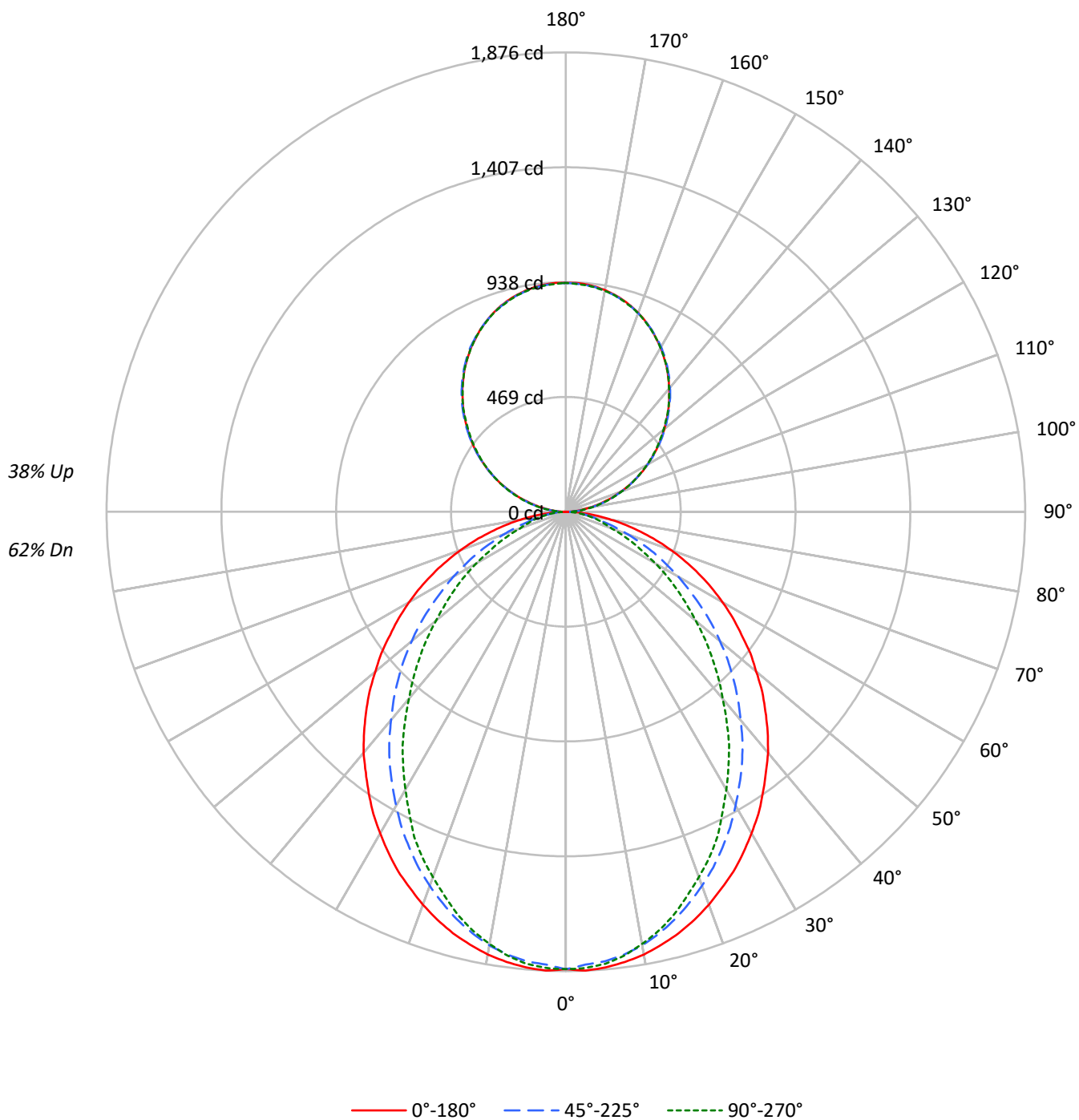
Lumens per Lamp: N/A
Luminaire Lumens: 6812.0 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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

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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	97	93	89	94	91	87	84	80	77	75	69	68	66	60	59	58
2	92	85	79	74	86	80	74	70	70	66	63	61	58	56	53	51	49
3	84	75	68	62	79	71	64	59	62	57	53	55	51	48	48	45	42
4	77	67	59	53	72	63	56	50	56	50	46	49	45	41	43	39	37
5	71	60	52	46	67	56	49	44	50	44	40	44	40	36	39	35	32
6	66	54	46	40	62	51	43	38	45	39	35	40	35	32	35	31	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	28	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21
10	50	37	30	25	46	36	29	24	32	26	23	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	20139	19395	19343
10°	19980	18665	18298
15°	19721	17764	17154
20°	19381	16784	15875
25°	19030	15765	14664
30°	18581	14682	13231
35°	18116	13618	11928
40°	17681	12462	10487
45°	17122	11332	9191
50°	16505	10124	7851
55°	15865	8832	6623
60°	15255	7507	5376
65°	14465	6147	4195
70°	13473	4649	2999
75°	12043	3148	2376
80°	10282	2187	1667
85°	7713	1181	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.6
10°-20°	488.5	7.2
20°-30°	703.3	10.3
30°-40°	792.1	11.6
40°-50°	757.6	11.1
50°-60°	620.2	9.1
60°-70°	418.1	6.1
70°-80°	209.7	3.1
80°-90°	56.8	0.8
90°-100°	60.2	0.9
100°-110°	182.1	2.7
110°-120°	310.1	4.6
120°-130°	407.9	6.0
130°-140°	458.5	6.7
140°-150°	450.7	6.6
150°-160°	379.5	5.6
160°-170°	252.6	3.7
170°-180°	88.5	1.3
0°-30°	1367.4	20.1
0°-40°	2159.5	31.7
0°-60°	3537.3	51.9
0°-90°	4222.0	62.0
90°-120°	552.3	8.1
90°-150°	1869.5	27.4
90°-180°	2590.0	38.0
0°-180°	6812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1868	1860	1842	1856	1853	177
15°	1782	1765	1722	1715	1704	502
25°	1621	1583	1513	1482	1465	746
35°	1403	1348	1254	1189	1162	878
45°	1153	1085	968	882	845	890
55°	876	801	673	585	554	785
65°	598	515	397	323	306	592
75°	317	244	161	145	142	337
85°	80	47	42	39	39	88
90°	1	8	18	21	22	8
95°	43	48	54	57	57	48
105°	165	167	173	173	175	177
115°	312	314	313	314	313	309
125°	457	459	458	454	452	407
135°	593	597	596	593	592	457
145°	719	720	722	722	719	449
155°	823	823	824	827	822	379
165°	897	894	894	899	894	253
175°	932	930	930	934	929	89
180°	935	935	935	935	935	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1875.5	1869.5	1851.3	1867.9	1864.9
5°	1867.9	1860.4	1842.2	1855.8	1852.8
7.5°	1854.3	1846.7	1824.0	1833.1	1828.5
10°	1836.1	1825.5	1798.2	1799.8	1792.2
12.5°	1810.4	1798.2	1763.4	1761.9	1752.8
15°	1781.6	1764.9	1722.5	1714.9	1704.3
17.5°	1746.7	1728.6	1675.5	1660.4	1645.2
20°	1707.4	1683.1	1625.5	1605.8	1587.7
22.5°	1663.4	1634.6	1572.5	1546.8	1530.1
25°	1621.0	1583.1	1513.4	1481.6	1465.0
27.5°	1569.5	1528.6	1452.8	1410.4	1384.7
30°	1516.5	1471.0	1386.2	1334.7	1310.4
32.5°	1463.4	1410.4	1319.5	1262.0	1236.2
35°	1402.8	1348.3	1254.4	1189.2	1162.0
37.5°	1342.2	1283.2	1184.7	1112.0	1078.6
40°	1284.7	1218.0	1110.5	1031.7	996.8
42.5°	1219.5	1152.9	1040.8	952.9	922.6
45°	1152.9	1084.7	968.1	881.7	845.3
47.5°	1087.7	1012.0	896.9	802.9	771.1
50°	1015.0	943.8	821.1	727.2	692.3
52.5°	949.9	871.1	749.9	651.4	621.1
55°	875.6	801.4	672.6	584.8	554.5
57.5°	809.0	728.7	598.4	515.1	489.3
60°	739.3	656.0	530.2	448.4	422.7
62.5°	669.6	586.3	460.5	384.8	357.5
65°	598.4	515.1	396.9	322.7	306.0
67.5°	527.2	442.4	327.2	271.2	253.0
70°	457.5	375.7	269.7	216.6	200.0
72.5°	387.8	307.5	213.6	172.7	168.2
75°	316.6	243.9	160.6	145.4	142.4
77.5°	251.5	184.8	125.7	116.7	113.6
80°	189.4	127.3	95.4	90.9	87.9
82.5°	130.3	78.8	68.2	63.6	63.6
85°	80.3	47.0	42.4	39.4	39.4
87.5°	36.4	19.7	19.7	18.2	16.7
90°	0.7	8.1	17.6	20.6	22.0
92.5°	22.0	26.4	30.8	33.0	31.6
95°	43.3	48.5	54.3	57.3	57.3
97.5°	71.2	74.9	79.3	83.0	82.2
100°	99.9	104.3	107.9	110.1	111.6
102.5°	132.9	135.1	140.2	142.5	141.7
105°	165.2	166.7	173.3	173.3	174.8
107.5°	203.4	204.1	207.1	209.3	208.5
110°	238.6	240.1	241.6	244.5	243.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	275.4	276.1	276.1	279.8	279.8
115°	312.1	314.3	312.8	313.5	312.8
117.5°	349.5	350.3	348.8	348.8	346.6
120°	384.0	388.4	384.8	384.0	382.6
122.5°	420.0	423.0	421.5	419.3	417.1
125°	456.7	458.9	457.5	454.5	451.6
127.5°	490.5	494.9	493.4	489.0	486.1
130°	524.3	530.2	528.0	525.0	519.9
132.5°	558.1	563.9	562.5	558.8	555.1
135°	592.6	597.0	596.2	593.3	591.8
137.5°	624.1	627.8	630.0	626.3	624.1
140°	657.2	660.9	661.6	660.9	655.7
142.5°	687.3	691.0	692.4	691.7	688.0
145°	718.9	720.3	722.5	721.8	718.9
147.5°	746.0	749.0	751.2	751.2	746.8
150°	774.7	776.1	777.6	777.6	773.2
152.5°	798.2	800.4	801.1	802.6	798.9
155°	823.1	823.1	823.9	826.8	821.7
157.5°	844.4	843.7	844.4	847.4	843.0
160°	864.3	862.8	862.8	866.5	863.5
162.5°	881.9	879.7	880.4	884.1	878.9
165°	896.6	894.4	894.4	898.8	893.6
167.5°	909.1	906.1	906.8	911.3	906.8
170°	919.3	916.4	916.4	921.5	916.4
172.5°	927.4	924.5	924.5	928.9	923.7
175°	932.5	929.6	929.6	934.0	928.9
177.5°	935.5	932.5	932.5	937.0	931.8
180°	934.8	934.8	934.8	934.8	934.8

(END OF REPORT)