

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: P1012348

Luminaire Tested: S123RDIP-B1165D365UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012348
REPORT IS A COMBINATION OF REPORTS P993037 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D365UB50-4F0-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

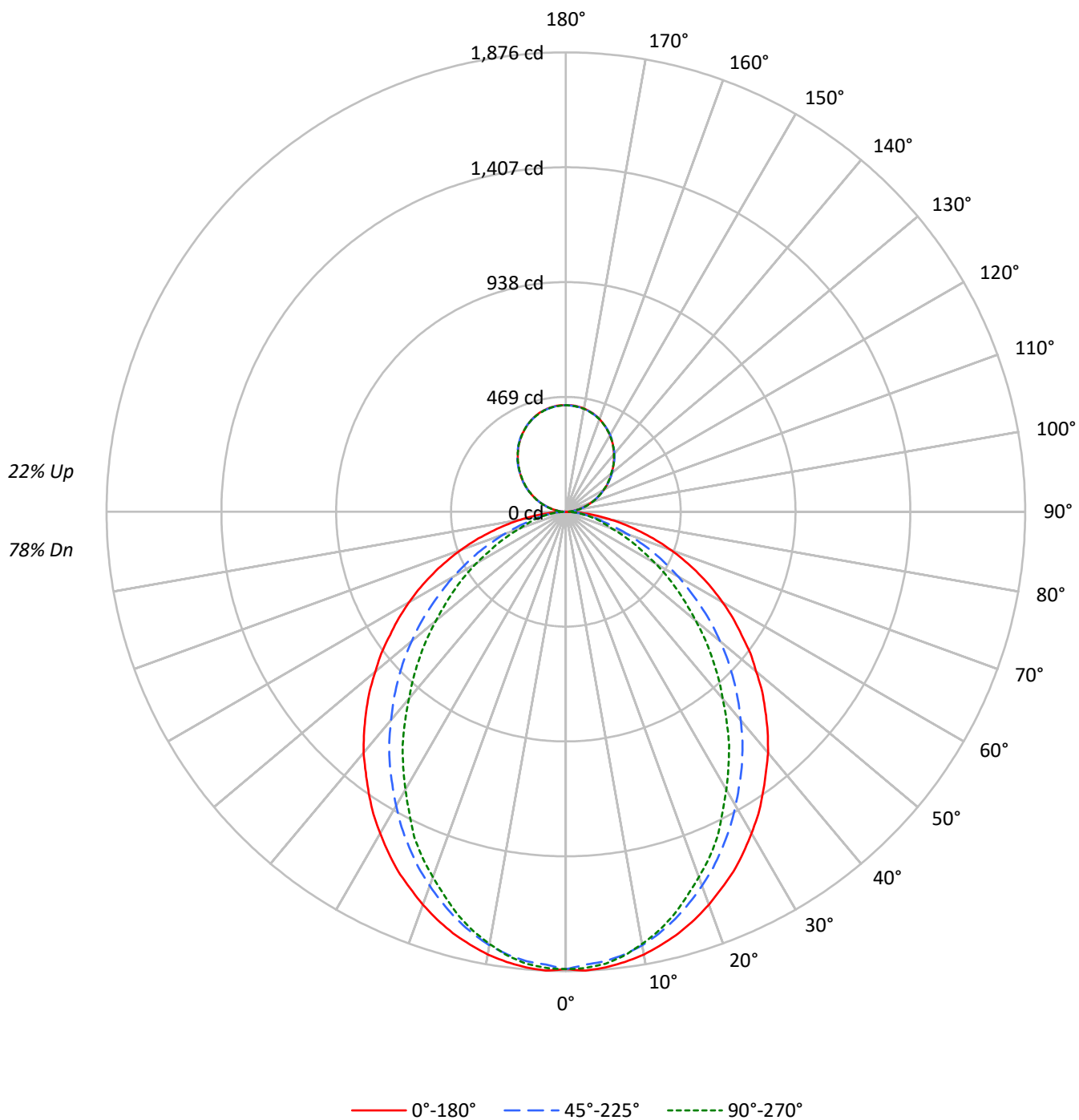
Lumens per Lamp: N/A
Luminaire Lumens: 5427.0 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	3.2
10°-20°	488.5	9.0
20°-30°	703.3	13.0
30°-40°	792.1	14.6
40°-50°	757.6	14.0
50°-60°	620.2	11.4
60°-70°	418.1	7.7
70°-80°	209.7	3.9
80°-90°	55.8	1.0
90°-100°	28.0	0.5
100°-110°	84.8	1.6
110°-120°	144.4	2.7
120°-130°	189.9	3.5
130°-140°	213.5	3.9
140°-150°	209.9	3.9
150°-160°	176.7	3.3
160°-170°	117.6	2.2
170°-180°	41.2	0.8
0°-30°	1367.4	25.2
0°-40°	2159.5	39.8
0°-60°	3537.3	65.2
0°-90°	4220.9	77.8
90°-120°	257.2	4.7
90°-150°	870.6	16.0
90°-180°	1206.0	22.2
0°-180°	5427.0	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°	0	4	8	10	10	6
95°	20	23	25	27	27	22
105°	77	78	81	81	81	82
115°	145	146	146	146	146	144
125°	213	214	213	212	210	190
135°	276	278	278	276	276	213
145°	335	335	336	336	335	209
155°	383	383	384	385	383	176
165°	418	416	416	418	416	118
175°	434	433	433	435	432	41
180°	435	435	435	435	435	

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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°	0.3	3.8	8.2	9.6	10.3
92.5°	10.3	12.3	14.4	15.4	14.7
95°	20.2	22.6	25.3	26.7	26.7
97.5°	33.2	34.9	36.9	38.6	38.3
100°	46.5	48.6	50.3	51.3	52.0
102.5°	61.9	62.9	65.3	66.3	66.0
105°	76.9	77.6	80.7	80.7	81.4
107.5°	94.7	95.1	96.4	97.5	97.1
110°	111.1	111.8	112.5	113.9	113.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.2	128.6	128.6	130.3	130.3
115°	145.3	146.3	145.7	146.0	145.7
117.5°	162.8	163.1	162.4	162.4	161.4
120°	178.8	180.9	179.2	178.8	178.1
122.5°	195.6	197.0	196.3	195.2	194.2
125°	212.7	213.7	213.0	211.7	210.3
127.5°	228.4	230.5	229.8	227.7	226.4
130°	244.1	246.9	245.8	244.5	242.1
132.5°	259.9	262.6	261.9	260.2	258.5
135°	275.9	278.0	277.6	276.3	275.6
137.5°	290.6	292.4	293.4	291.7	290.6
140°	306.0	307.7	308.1	307.7	305.3
142.5°	320.0	321.8	322.4	322.1	320.4
145°	334.8	335.4	336.5	336.1	334.8
147.5°	347.4	348.8	349.8	349.8	347.7
150°	360.7	361.4	362.1	362.1	360.1
152.5°	371.7	372.7	373.0	373.7	372.0
155°	383.3	383.3	383.6	385.0	382.6
157.5°	393.2	392.9	393.2	394.6	392.5
160°	402.5	401.8	401.8	403.5	402.1
162.5°	410.7	409.6	410.0	411.7	409.3
165°	417.5	416.5	416.5	418.5	416.1
167.5°	423.3	421.9	422.3	424.3	422.3
170°	428.1	426.7	426.7	429.1	426.7
172.5°	431.9	430.5	430.5	432.5	430.2
175°	434.3	432.9	432.9	434.9	432.5
177.5°	435.6	434.3	434.3	436.3	433.9
180°	435.3	435.3	435.3	435.3	435.3

(END OF REPORT)