

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: P1012405

Luminaire Tested: S123RDIP-B1165D805UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012405
REPORT IS A COMBINATION OF REPORTS P993118 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-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

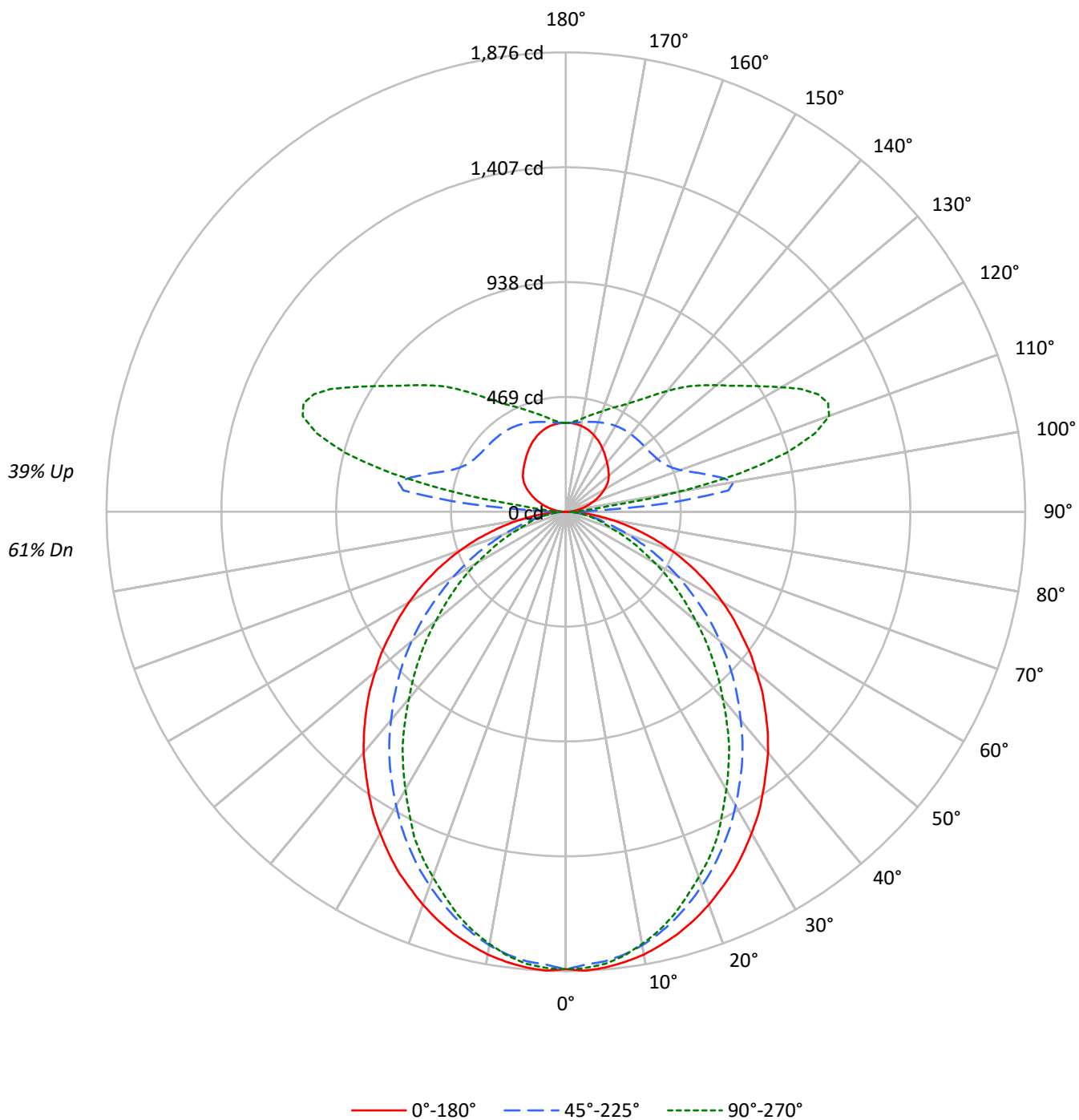
Lumens per Lamp: N/A
Luminaire Lumens: 6956.3 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P1012405

CATALOG NUMBER: S123RDIP-B1165D805UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1012405

CATALOG NUMBER: S123RDIP-B1165D805UB50-4F0-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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	101	96	93	89	94	90	87	84	79	77	74	69	67	65	59	58	57
2	92	85	79	73	86	79	74	70	70	66	62	61	58	55	52	50	48
3	84	75	67	62	78	70	64	59	62	57	53	54	50	47	47	44	41
4	77	66	59	53	72	63	56	50	55	50	45	48	44	41	42	39	36
5	71	59	51	45	66	56	49	43	50	44	39	44	39	35	38	34	32
6	66	54	45	40	61	51	43	38	45	39	35	40	35	31	35	31	28
7	61	48	41	35	57	46	39	33	41	35	31	36	31	28	32	28	25
8	56	44	36	31	53	42	35	30	37	32	27	33	28	25	29	25	23
9	53	40	33	28	49	38	31	27	34	29	25	31	26	23	27	23	20
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	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

TEST NUMBER: P1012405

CATALOG NUMBER: S123RDIP-B1165D805UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.5
10°-20°	488.5	7.0
20°-30°	703.3	10.1
30°-40°	792.1	11.4
40°-50°	757.6	10.9
50°-60°	620.2	8.9
60°-70°	418.1	6.0
70°-80°	209.7	3.0
80°-90°	56.9	0.8
90°-100°	206.1	3.0
100°-110°	576.0	8.3
110°-120°	561.7	8.1
120°-130°	447.2	6.4
130°-140°	353.1	5.1
140°-150°	263.4	3.8
150°-160°	183.8	2.6
160°-170°	107.9	1.6
170°-180°	35.1	0.5
0°-30°	1367.4	19.7
0°-40°	2159.5	31.0
0°-60°	3537.3	50.9
0°-90°	4222.0	60.7
90°-120°	1343.8	19.3
90°-150°	2407.5	34.6
90°-180°	2734.0	39.3
0°-180°	6956.3	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°	2	9	18	21	21	7
95°	25	81	435	127	85	26
105°	85	126	590	1032	934	90
115°	150	188	452	990	1136	149
125°	209	247	421	764	896	186
135°	245	293	416	629	726	189
145°	280	320	410	516	568	175
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

TEST NUMBER: P1012405

CATALOG NUMBER: S123RDIP-B1165D805UB50-4F0-XX-W2A-F4

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°	1.5	8.8	18.4	20.6	21.3
92.5°	11.0	44.0	136.5	46.6	38.9
95°	25.0	81.1	435.3	127.0	85.2
97.5°	39.6	92.9	669.5	319.4	174.7
100°	54.3	102.4	695.2	668.0	460.3
102.5°	69.7	113.4	647.5	894.6	729.0
105°	85.2	125.9	590.2	1032.2	933.8
107.5°	101.3	140.6	539.6	1092.8	1067.4
110°	118.9	155.6	497.7	1094.6	1143.8

TEST NUMBER: P1012405

CATALOG NUMBER: S123RDIP-B1165D805UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.1	171.4	469.8	1053.1	1159.2
115°	150.5	187.6	451.5	990.0	1135.7
117.5°	165.9	203.0	439.0	922.4	1084.3
120°	182.1	218.4	430.9	858.6	1016.8
122.5°	196.0	233.1	425.8	808.3	953.6
125°	209.2	247.0	421.4	763.5	895.6
127.5°	219.5	260.2	419.2	726.8	845.7
130°	229.1	272.0	417.0	693.0	804.6
132.5°	236.4	282.6	416.3	661.4	764.2
135°	245.2	292.6	415.5	628.8	726.1
137.5°	253.3	300.6	414.1	598.0	685.7
140°	261.4	308.0	413.3	567.8	643.1
142.5°	270.2	314.6	411.9	540.3	603.5
145°	279.7	320.4	410.4	515.8	567.5
147.5°	289.2	326.6	408.2	496.6	536.7
150°	298.8	331.8	405.2	479.8	510.2
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)