

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: P1010846

Luminaire Tested: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010846
REPORT IS A COMBINATION OF REPORTS P993012 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_3500K
Description: Define 3 Regressed Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

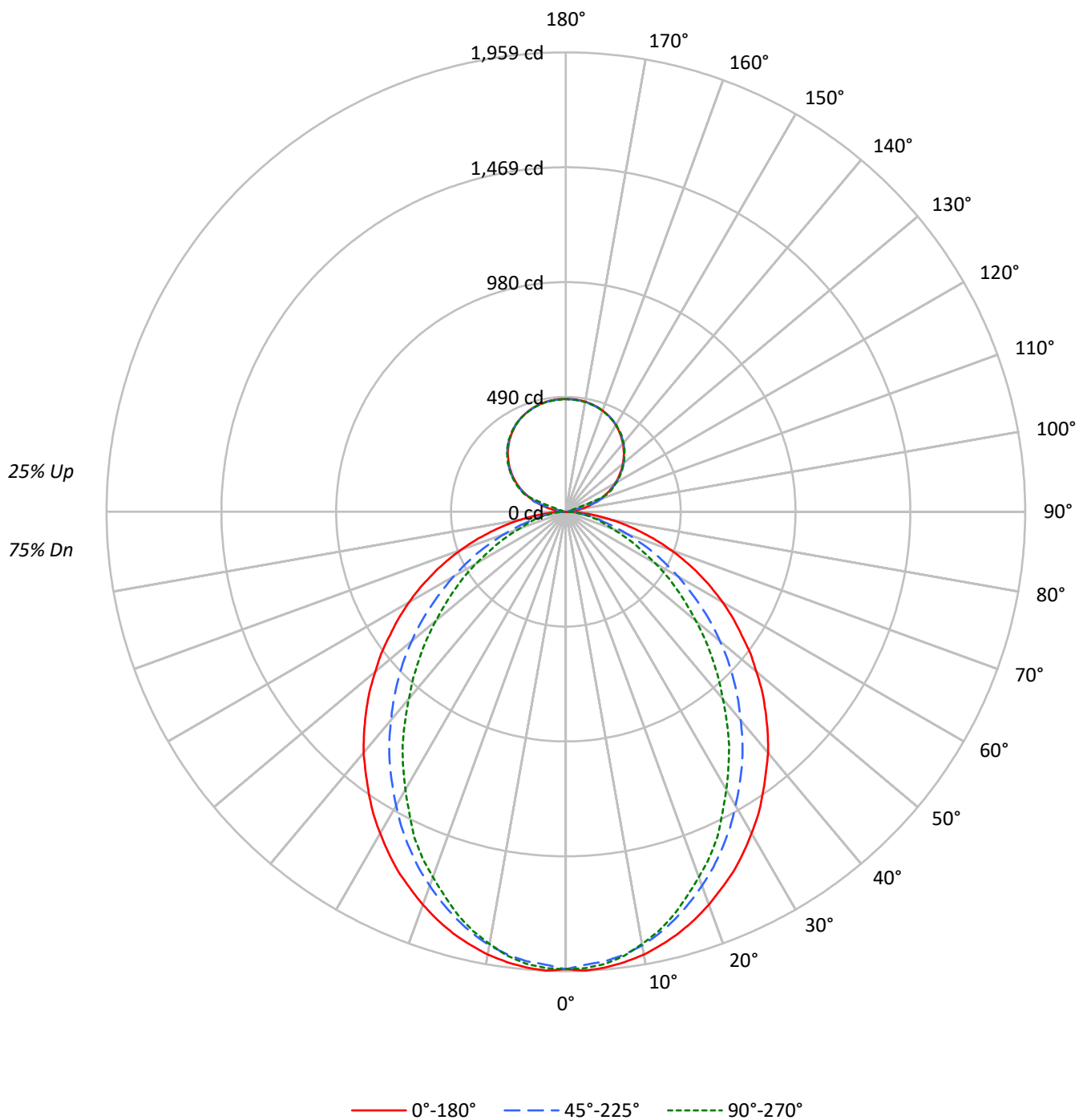
Lumens per Lamp: N/A
Luminaire Lumens: 5873.0 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20997	20997	20997
5°	21031	20254	20200
10°	20866	19492	19109
15°	20595	18551	17913
20°	20240	17528	16578
25°	19873	16464	15314
30°	19404	15332	13818
35°	18919	14221	12457
40°	18464	13014	10952
45°	17881	11834	9599
50°	17237	10573	8199
55°	16568	9223	6915
60°	15932	7839	5613
65°	15106	6420	4382
70°	14071	4854	3131
75°	12580	3287	2481
80°	10738	2285	1741
85°	8059	1234	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	3.1
10°-20°	510.1	8.7
20°-30°	734.5	12.5
30°-40°	827.2	14.1
40°-50°	791.2	13.5
50°-60°	647.7	11.0
60°-70°	436.7	7.4
70°-80°	219.0	3.7
80°-90°	58.2	1.0
90°-100°	16.9	0.3
100°-110°	81.9	1.4
110°-120°	200.8	3.4
120°-130°	254.9	4.3
130°-140°	272.3	4.6
140°-150°	254.6	4.3
150°-160°	205.4	3.5
160°-170°	132.5	2.3
170°-180°	45.7	0.8
0°-30°	1428.0	24.3
0°-40°	2255.2	38.4
0°-60°	3694.0	62.9
0°-90°	4408.0	75.1
90°-120°	299.6	5.1
90°-150°	1081.4	18.4
90°-180°	1465.0	24.9
0°-180°	5873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1951	1943	1924	1938	1935	185
15°	1860	1843	1799	1791	1780	524
25°	1693	1653	1580	1547	1530	779
35°	1465	1408	1310	1242	1214	917
45°	1204	1133	1011	921	883	929
55°	914	837	702	611	579	820
65°	625	538	414	337	320	618
75°	331	255	168	152	149	352
85°	84	49	44	41	41	92
90°	0	4	9	10	11	6
95°	22	7	11	14	14	26
105°	106	110	78	15	16	113
115°	200	202	205	208	210	197
125°	281	284	286	286	287	251
135°	350	352	354	355	354	270
145°	404	407	407	408	408	253
155°	445	444	445	447	444	205
165°	470	468	468	471	468	133
175°	481	479	479	482	479	46
180°	481	481	481	481	481	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1950.7	1950.7	1950.7	1950.7	1950.7
2.5°	1958.6	1952.3	1933.3	1950.7	1947.5
5°	1950.7	1942.8	1923.8	1938.1	1934.9
7.5°	1936.5	1928.6	1904.8	1914.3	1909.6
10°	1917.5	1906.4	1877.9	1879.5	1871.6
12.5°	1890.6	1877.9	1841.5	1840.0	1830.5
15°	1860.5	1843.1	1798.8	1790.9	1779.8
17.5°	1824.1	1805.2	1749.8	1734.0	1718.1
20°	1783.0	1757.7	1697.6	1677.0	1658.0
22.5°	1737.1	1707.1	1642.2	1615.3	1597.9
25°	1692.8	1653.3	1580.5	1547.3	1529.9
27.5°	1639.0	1596.3	1517.2	1472.9	1446.0
30°	1583.7	1536.2	1447.6	1393.8	1368.5
32.5°	1528.3	1472.9	1378.0	1317.9	1291.0
35°	1465.0	1408.1	1310.0	1241.9	1213.5
37.5°	1401.7	1340.0	1237.2	1161.2	1126.4
40°	1341.6	1272.0	1159.7	1077.4	1041.0
42.5°	1273.6	1204.0	1086.9	995.1	963.5
45°	1204.0	1132.8	1011.0	920.8	882.8
47.5°	1135.9	1056.8	936.6	838.5	805.3
50°	1060.0	985.6	857.5	759.4	723.0
52.5°	992.0	909.7	783.1	680.3	648.7
55°	914.4	836.9	702.4	610.7	579.0
57.5°	844.8	761.0	624.9	537.9	511.0
60°	772.1	685.0	553.7	468.3	441.4
62.5°	699.3	612.3	481.0	401.8	373.4
65°	624.9	537.9	414.5	337.0	319.6
67.5°	550.6	462.0	341.7	283.2	264.2
70°	477.8	392.4	281.6	226.2	208.8
72.5°	405.0	321.2	223.1	180.4	175.6
75°	330.7	254.7	167.7	151.9	148.7
77.5°	262.6	193.0	131.3	121.8	118.7
80°	197.8	132.9	99.7	94.9	91.8
82.5°	136.1	82.3	71.2	66.4	66.4
85°	83.9	49.0	44.3	41.1	41.1
87.5°	38.0	20.6	20.6	19.0	17.4
90°	0.4	3.9	8.6	10.0	10.7
92.5°	8.2	6.1	9.3	11.8	12.1
95°	21.8	7.1	11.1	13.6	13.6
97.5°	39.6	29.6	11.4	14.3	14.6
100°	60.3	67.5	11.8	14.6	15.0
102.5°	83.9	88.5	26.4	14.6	15.4
105°	106.4	110.3	78.2	15.0	15.7
107.5°	130.3	133.5	138.9	83.9	37.1
110°	154.2	157.1	161.0	149.2	98.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.1	179.6	183.5	186.7	186.0
115°	199.6	201.7	204.9	208.5	209.9
117.5°	221.7	224.2	226.0	228.9	229.2
120°	242.1	245.3	246.4	249.2	249.2
122.5°	262.8	265.3	266.7	268.5	268.8
125°	281.3	284.2	285.6	286.3	287.1
127.5°	299.9	302.8	304.5	305.6	304.9
130°	317.0	319.9	321.3	322.8	322.0
132.5°	333.5	336.3	337.4	338.8	337.8
135°	350.2	352.4	353.8	354.9	353.8
137.5°	364.5	367.4	368.1	369.9	369.2
140°	378.8	381.0	382.0	383.5	382.7
142.5°	392.0	394.2	395.2	396.3	395.2
145°	404.2	406.7	407.4	408.1	408.1
147.5°	415.9	417.7	418.4	419.2	417.4
150°	426.7	427.7	428.4	429.2	428.1
152.5°	436.3	436.6	437.0	438.4	436.6
155°	445.2	444.5	444.9	446.6	444.5
157.5°	452.4	452.4	452.0	454.1	451.3
160°	458.8	458.4	458.1	460.2	457.7
162.5°	464.9	463.8	463.4	465.9	463.8
165°	469.5	468.4	468.1	470.9	468.4
167.5°	473.4	472.0	472.0	474.9	472.0
170°	476.6	475.2	475.2	478.1	475.2
172.5°	478.8	477.0	477.4	480.2	477.0
175°	480.6	478.8	479.1	481.6	478.8
177.5°	481.3	479.5	479.8	482.7	479.1
180°	480.6	480.6	480.6	480.6	480.6

(END OF REPORT)