

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: P1010845

Luminaire Tested: S123RDIP-B1165D365UB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010845
REPORT IS A COMBINATION OF REPORTS P993011 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_3000K
Description: Define 3 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

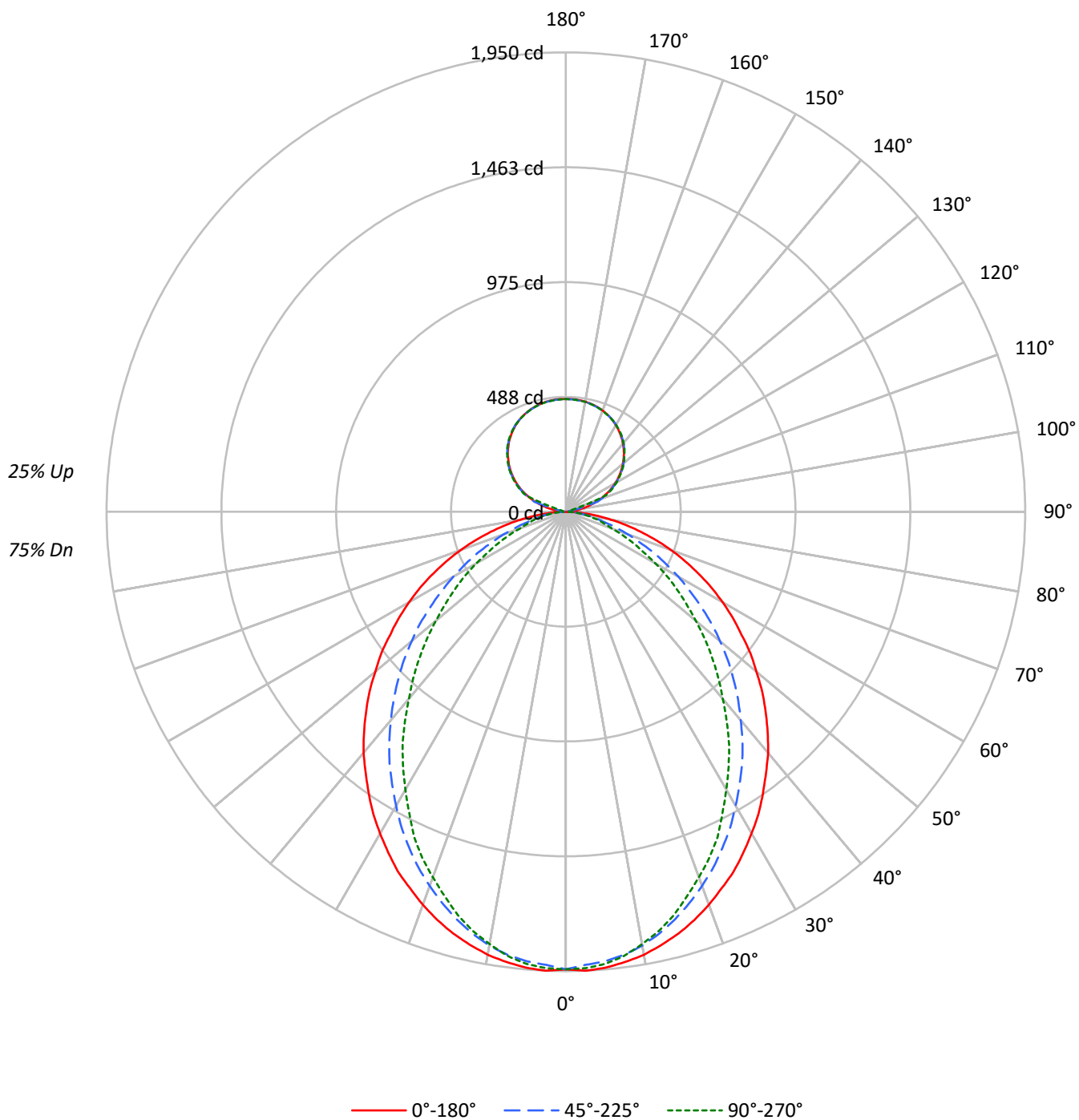
Lumens per Lamp: N/A
Luminaire Lumens: 5848.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	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°	20907	20907	20907
5°	20941	20167	20112
10°	20776	19408	19026
15°	20506	18472	17837
20°	20152	17453	16507
25°	19787	16393	15248
30°	19319	15266	13759
35°	18838	14159	12402
40°	18384	12958	10904
45°	17804	11782	9558
50°	17162	10527	8164
55°	16498	9184	6885
60°	15862	7805	5589
65°	15041	6392	4362
70°	14009	4834	3117
75°	12523	3274	2471
80°	10690	2274	1733
85°	8021	1228	909

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17804 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	3.1
10°-20°	507.9	8.7
20°-30°	731.3	12.5
30°-40°	823.6	14.1
40°-50°	787.8	13.5
50°-60°	644.9	11.0
60°-70°	434.8	7.4
70°-80°	218.1	3.7
80°-90°	58.0	1.0
90°-100°	16.9	0.3
100°-110°	81.6	1.4
110°-120°	200.0	3.4
120°-130°	253.8	4.3
130°-140°	271.2	4.6
140°-150°	253.6	4.3
150°-160°	204.5	3.5
160°-170°	132.0	2.3
170°-180°	45.5	0.8
0°-30°	1421.8	24.3
0°-40°	2245.4	38.4
0°-60°	3678.1	62.9
0°-90°	4389.0	75.1
90°-120°	298.5	5.1
90°-150°	1077.0	18.4
90°-180°	1459.0	24.9
0°-180°	5848.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1942	1934	1916	1930	1926	184
15°	1852	1835	1791	1783	1772	522
25°	1686	1646	1574	1541	1523	775
35°	1459	1402	1304	1237	1208	913
45°	1199	1128	1007	917	879	925
55°	910	833	699	608	576	817
65°	622	536	413	336	318	616
75°	329	254	167	151	148	351
85°	84	49	44	41	41	91
90°	0	4	8	10	11	6
95°	22	7	11	14	14	26
105°	106	110	78	15	16	112
115°	199	201	204	208	209	196
125°	280	283	284	285	286	250
135°	349	351	352	353	352	269
145°	402	405	406	406	406	252
155°	443	443	443	445	443	204
165°	468	466	466	469	466	132
175°	479	477	477	480	477	46
180°	479	479	479	479	479	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1942.3	1942.3	1942.3	1942.3	1942.3
2.5°	1950.2	1943.9	1925.0	1942.3	1939.1
5°	1942.3	1934.4	1915.5	1929.7	1926.5
7.5°	1928.1	1920.2	1896.6	1906.1	1901.3
10°	1909.2	1898.2	1869.8	1871.4	1863.5
12.5°	1882.4	1869.8	1833.6	1832.0	1822.6
15°	1852.5	1835.2	1791.1	1783.2	1772.2
17.5°	1816.3	1797.4	1742.2	1726.5	1710.7
20°	1775.3	1750.1	1690.3	1669.8	1650.9
22.5°	1729.6	1699.7	1635.1	1608.3	1591.0
25°	1685.5	1646.2	1573.7	1540.6	1523.3
27.5°	1632.0	1589.4	1510.7	1466.6	1439.8
30°	1576.8	1529.6	1441.4	1387.8	1362.6
32.5°	1521.7	1466.6	1372.1	1312.2	1285.4
35°	1458.7	1402.0	1304.3	1236.6	1208.2
37.5°	1395.7	1334.2	1231.9	1156.2	1121.6
40°	1335.8	1266.5	1154.7	1072.8	1036.5
42.5°	1268.1	1198.8	1082.2	990.8	959.3
45°	1198.8	1127.9	1006.6	916.8	879.0
47.5°	1131.0	1052.3	932.6	834.9	801.8
50°	1055.4	981.4	853.8	756.1	719.9
52.5°	987.7	905.8	779.8	677.4	645.9
55°	910.5	833.3	699.4	608.1	576.5
57.5°	841.2	757.7	622.2	535.6	508.8
60°	768.7	682.1	551.3	466.3	439.5
62.5°	696.3	609.6	478.9	400.1	371.8
65°	622.2	535.6	412.7	335.5	318.2
67.5°	548.2	460.0	340.3	282.0	263.1
70°	475.7	390.7	280.4	225.3	207.9
72.5°	403.3	319.8	222.1	179.6	174.9
75°	329.2	253.6	167.0	151.2	148.1
77.5°	261.5	192.2	130.7	121.3	118.1
80°	196.9	132.3	99.2	94.5	91.4
82.5°	135.5	81.9	70.9	66.2	66.2
85°	83.5	48.8	44.1	41.0	41.0
87.5°	37.8	20.5	20.5	18.9	17.3
90°	0.4	3.9	8.5	10.0	10.7
92.5°	8.2	6.0	9.2	11.7	12.1
95°	21.7	7.1	11.0	13.5	13.5
97.5°	39.5	29.5	11.4	14.2	14.6
100°	60.1	67.2	11.7	14.6	14.9
102.5°	83.6	88.2	26.3	14.6	15.3
105°	106.0	109.9	77.9	14.9	15.6
107.5°	129.8	133.0	138.3	83.6	37.0
110°	153.6	156.5	160.4	148.6	97.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	178.9	182.8	186.0	185.3
115°	198.8	200.9	204.1	207.7	209.1
117.5°	220.8	223.3	225.1	227.9	228.3
120°	241.1	244.3	245.3	248.2	248.2
122.5°	261.7	264.2	265.6	267.4	267.7
125°	280.2	283.0	284.5	285.2	285.9
127.5°	298.7	301.5	303.3	304.4	303.7
130°	315.7	318.6	320.0	321.4	320.7
132.5°	332.1	334.9	336.0	337.4	336.4
135°	348.8	350.9	352.4	353.4	352.4
137.5°	363.0	365.9	366.6	368.4	367.7
140°	377.3	379.4	380.5	381.9	381.2
142.5°	390.4	392.5	393.6	394.7	393.6
145°	402.5	405.0	405.7	406.4	406.4
147.5°	414.2	416.0	416.7	417.4	415.7
150°	424.9	426.0	426.7	427.4	426.3
152.5°	434.5	434.9	435.2	436.6	434.9
155°	443.4	442.7	443.0	444.8	442.7
157.5°	450.5	450.5	450.2	452.3	449.4
160°	456.9	456.6	456.2	458.3	455.8
162.5°	463.0	461.9	461.5	464.0	461.9
165°	467.6	466.5	466.2	469.0	466.5
167.5°	471.5	470.1	470.1	472.9	470.1
170°	474.7	473.3	473.3	476.1	473.3
172.5°	476.8	475.0	475.4	478.2	475.0
175°	478.6	476.8	477.2	479.7	476.8
177.5°	479.3	477.5	477.9	480.7	477.2
180°	478.6	478.6	478.6	478.6	478.6

(END OF REPORT)