

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: P1011246

Luminaire Tested: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011246
REPORT IS A COMBINATION OF REPORTS P989327 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

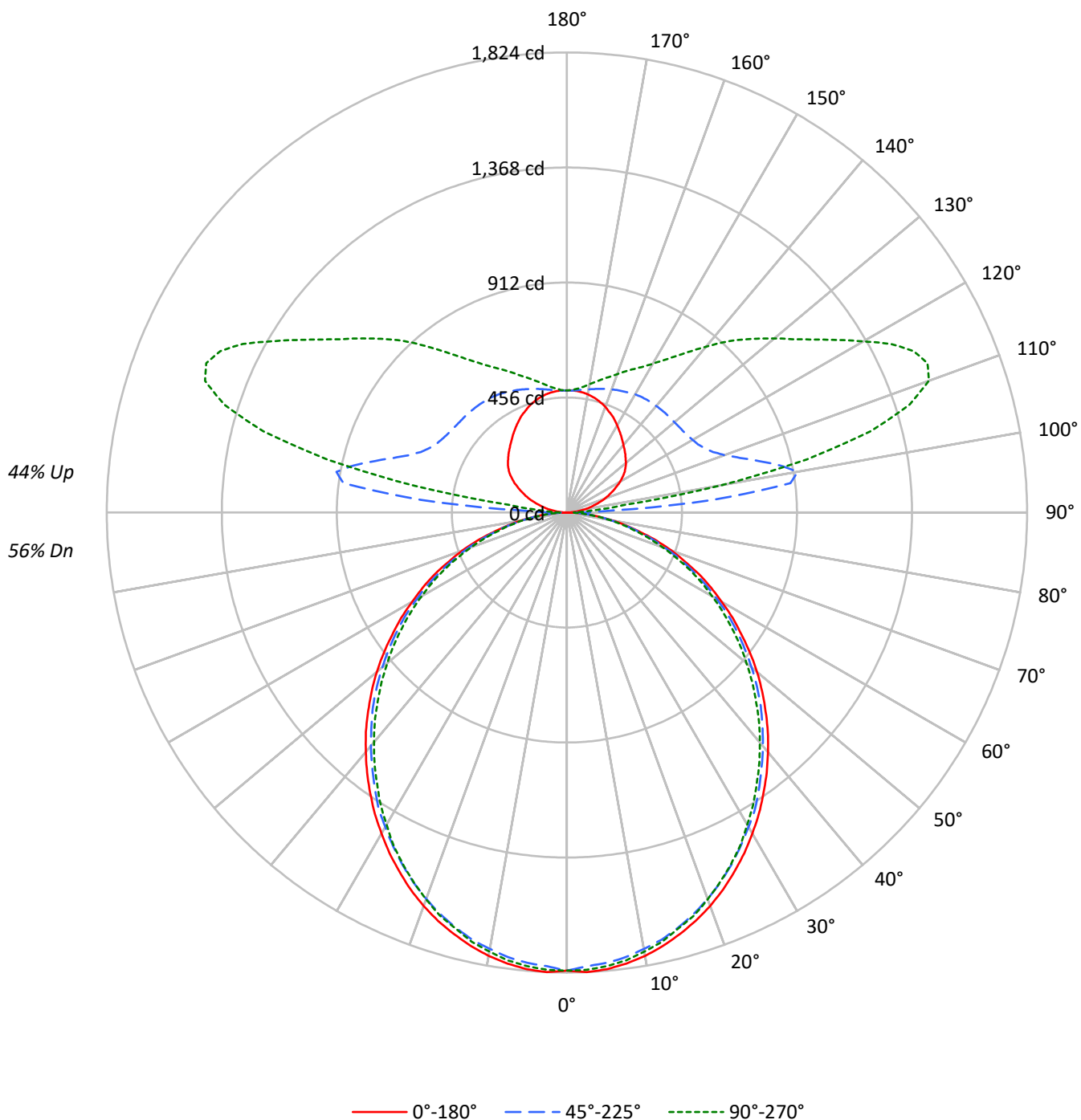
Lumens per Lamp: N/A
Luminaire Lumens: 8378.5 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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: P1011246

CATALOG NUMBER: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	53	52
2	90	83	76	71	84	77	72	67	67	63	59	57	54	51	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	50	47	43	43	40	37
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

TEST NUMBER: P1011246

CATALOG NUMBER: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.0
10°-20°	483.5	5.8
20°-30°	714.1	8.5
30°-40°	834.0	10.0
40°-50°	838.4	10.0
50°-60°	736.5	8.8
60°-70°	548.5	6.5
70°-80°	312.1	3.7
80°-90°	91.5	1.1
90°-100°	275.0	3.3
100°-110°	768.7	9.2
110°-120°	749.5	8.9
120°-130°	596.8	7.1
130°-140°	471.1	5.6
140°-150°	351.5	4.2
150°-160°	245.2	2.9
160°-170°	144.1	1.7
170°-180°	46.9	0.6
0°-30°	1368.8	16.3
0°-40°	2202.7	26.3
0°-60°	3777.6	45.1
0°-90°	4729.7	56.5
90°-120°	1793.2	21.4
90°-150°	3212.6	38.3
90°-180°	3649.0	43.6
0°-180°	8378.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	2	12	24	27	28	8
95°	33	108	581	169	114	35
105°	114	168	788	1377	1246	121
115°	201	250	602	1321	1516	199
125°	279	330	562	1019	1195	248
135°	327	390	554	839	969	253
145°	373	428	548	688	757	234
155°	424	458	530	602	628	195
165°	463	477	508	538	548	131
175°	483	483	487	494	493	46
180°	484	484	484	484	484	

TEST NUMBER: P1011246

CATALOG NUMBER: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
90°	2.0	11.8	24.5	27.4	28.4
92.5°	14.7	58.8	182.2	62.2	51.9
95°	33.3	108.2	580.9	169.4	113.6
97.5°	52.9	124.0	893.4	426.2	233.2
100°	72.5	136.7	927.7	891.4	614.2
102.5°	93.1	151.4	864.1	1193.7	972.8
105°	113.6	168.0	787.6	1377.4	1246.1
107.5°	135.2	187.6	720.0	1458.2	1424.4
110°	158.7	207.7	664.2	1460.7	1526.3

TEST NUMBER: P1011246

CATALOG NUMBER: S123DIP-B1165D1025UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.3	228.8	627.0	1405.3	1546.9
115°	200.8	250.3	602.5	1321.1	1515.5
117.5°	221.4	270.8	585.8	1230.9	1447.0
120°	243.0	291.4	575.1	1145.7	1356.8
122.5°	261.6	311.0	568.2	1078.6	1272.6
125°	279.2	329.6	562.3	1018.8	1195.2
127.5°	292.9	347.3	559.4	969.8	1128.6
130°	305.7	363.0	556.4	924.8	1073.7
132.5°	315.4	377.2	555.5	882.6	1019.8
135°	327.2	390.4	554.5	839.1	968.9
137.5°	338.0	401.2	552.5	797.9	915.0
140°	348.8	411.0	551.5	757.8	858.2
142.5°	360.5	419.8	549.6	721.0	805.3
145°	373.2	427.6	547.6	688.2	757.3
147.5°	386.0	436.0	544.7	662.8	716.1
150°	398.7	442.8	540.8	640.2	680.9
152.5°	411.5	450.2	535.9	620.6	651.5
155°	424.2	457.5	530.0	602.5	628.0
157.5°	434.0	463.9	525.1	584.9	605.4
160°	445.7	469.3	519.2	568.7	583.9
162.5°	454.6	473.2	513.3	553.5	564.3
165°	463.4	476.6	507.5	538.3	547.6
167.5°	470.2	479.6	501.6	525.1	531.0
170°	476.1	481.0	495.7	513.3	516.3
172.5°	480.0	482.5	490.8	503.0	502.6
175°	483.0	483.4	486.9	493.7	492.8
177.5°	484.9	483.9	483.9	487.9	485.9
180°	483.9	483.9	483.9	483.9	483.9

(END OF REPORT)