

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: P1011422

Luminaire Tested: S123DIP-B1165D805UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011422
REPORT IS A COMBINATION OF REPORTS P989566 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

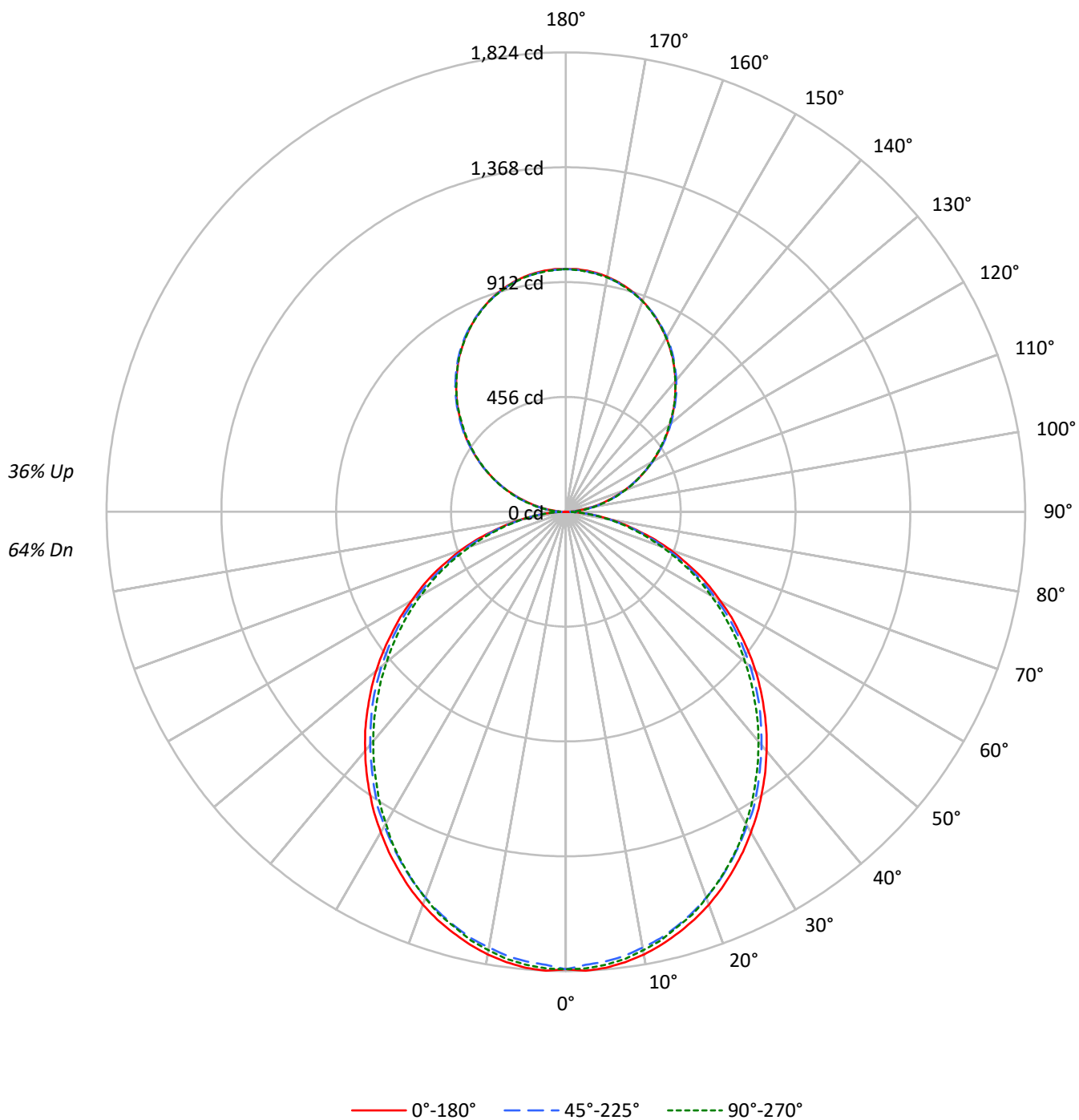
Lumens per Lamp: N/A
Luminaire Lumens: 7399.0 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1011422

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F1

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
RCR																	
0	110	110	110	110	104	104	104	104	91	91	91		80	80	80		69
1	101	96	92	89	94	91	87	84	80	77	75		70	68	66		61
2	92	84	78	72	86	79	74	69	70	66	62		61	58	55		53
3	84	74	66	60	78	70	63	58	62	56	52		54	50	47		47
4	77	66	57	51	72	62	55	49	55	49	44		48	44	40		42
5	70	58	50	44	66	55	48	42	49	43	38		43	39	35		38
6	65	53	44	38	61	50	42	37	44	38	34		39	34	30		35
7	60	47	39	34	56	45	38	32	40	34	30		36	31	27		32
8	56	43	35	30	52	41	34	29	37	31	26		33	28	24		29
9	52	40	32	27	49	38	30	26	34	28	24		30	25	22		27
10	49	36	29	24	46	35	28	23	31	25	21		28	23	20		25

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: P1011422

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.3
10°-20°	483.5	6.5
20°-30°	714.1	9.7
30°-40°	834.0	11.3
40°-50°	838.4	11.3
50°-60°	736.5	10.0
60°-70°	548.5	7.4
70°-80°	312.1	4.2
80°-90°	90.8	1.2
90°-100°	62.0	0.8
100°-110°	187.7	2.5
110°-120°	319.6	4.3
120°-130°	420.5	5.7
130°-140°	472.6	6.4
140°-150°	464.7	6.3
150°-160°	391.2	5.3
160°-170°	260.4	3.5
170°-180°	91.2	1.2
0°-30°	1368.8	18.5
0°-40°	2202.7	29.8
0°-60°	3777.6	51.1
0°-90°	4729.1	63.9
90°-120°	569.4	7.7
90°-150°	1927.2	26.0
90°-180°	2670.0	36.1
0°-180°	7399.0	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°	1	8	18	21	23	9
95°	45	50	56	59	59	49
105°	170	172	179	179	180	182
115°	322	324	322	323	322	318
125°	471	473	472	469	466	420
135°	611	615	615	612	610	471
145°	741	743	745	744	741	463
155°	848	848	849	852	847	391
165°	924	922	922	926	921	261
175°	961	958	958	963	958	91
180°	964	964	964	964	964	

TEST NUMBER: P1011422

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F1

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°	0.8	8.3	18.2	21.2	22.7
92.5°	22.7	27.3	31.8	34.1	32.5
95°	44.7	50.0	56.0	59.0	59.0
97.5°	73.4	77.2	81.8	85.5	84.8
100°	102.9	107.5	111.3	113.5	115.1
102.5°	137.0	139.3	144.6	146.8	146.1
105°	170.3	171.8	178.6	178.6	180.2
107.5°	209.7	210.4	213.5	215.7	215.0
110°	246.0	247.5	249.0	252.1	250.6

TEST NUMBER: P1011422

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.9	284.6	284.6	288.4	288.4
115°	321.7	324.0	322.5	323.2	322.5
117.5°	360.3	361.1	359.6	359.6	357.3
120°	395.9	400.4	396.6	395.9	394.4
122.5°	433.0	436.0	434.5	432.2	429.9
125°	470.8	473.1	471.6	468.6	465.5
127.5°	505.6	510.2	508.7	504.1	501.1
130°	540.5	546.5	544.2	541.2	535.9
132.5°	575.3	581.3	579.8	576.0	572.3
135°	610.9	615.4	614.6	611.6	610.1
137.5°	643.4	647.2	649.5	645.7	643.4
140°	677.5	681.3	682.0	681.3	676.0
142.5°	708.5	712.3	713.8	713.0	709.3
145°	741.1	742.6	744.8	744.1	741.1
147.5°	769.1	772.1	774.4	774.4	769.8
150°	798.6	800.1	801.6	801.6	797.1
152.5°	822.8	825.1	825.8	827.3	823.6
155°	848.5	848.5	849.3	852.3	847.0
157.5°	870.5	869.7	870.5	873.5	869.0
160°	890.9	889.4	889.4	893.2	890.2
162.5°	909.1	906.8	907.6	911.4	906.1
165°	924.2	922.0	922.0	926.5	921.2
167.5°	937.1	934.1	934.8	939.4	934.8
170°	947.7	944.7	944.7	950.0	944.7
172.5°	956.0	953.0	953.0	957.5	952.2
175°	961.3	958.3	958.3	962.8	957.5
177.5°	964.4	961.3	961.3	965.9	960.6
180°	963.6	963.6	963.6	963.6	963.6

(END OF REPORT)