

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: P1011423

Luminaire Tested: S123DIP-B1165D805UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011423
REPORT IS A COMBINATION OF REPORTS P989567 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB27-4F0-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

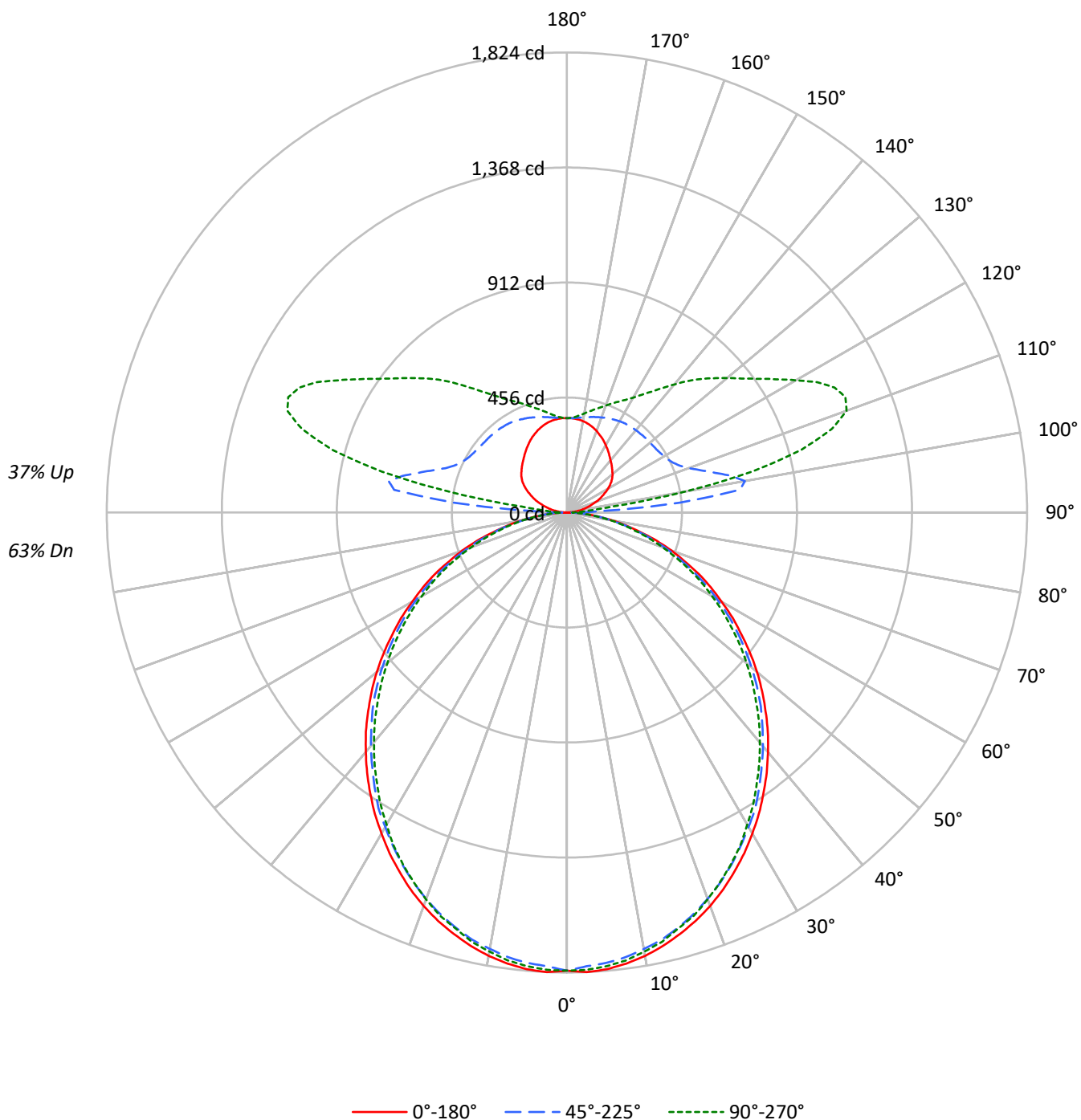
Lumens per Lamp: N/A
Luminaire Lumens: 7548.6 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P1011423

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1011423

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-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	90	90	90	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	43	41
4	76	65	57	51	71	62	54	49	54	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	47	42	49	43	38	43	38	34	37	34	31
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	34	28	36	30	26	32	27	24	29	25	22
9	52	39	32	27	49	37	30	25	33	28	23	30	25	21	26	22	19
10	49	36	29	24	45	34	28	23	31	25	21	28	23	19	24	21	18

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: P1011423

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.3
10°-20°	483.5	6.4
20°-30°	714.1	9.5
30°-40°	834.0	11.0
40°-50°	838.4	11.1
50°-60°	736.5	9.8
60°-70°	548.5	7.3
70°-80°	312.1	4.1
80°-90°	90.8	1.2
90°-100°	212.5	2.8
100°-110°	594.0	7.9
110°-120°	579.2	7.7
120°-130°	461.2	6.1
130°-140°	364.0	4.8
140°-150°	271.6	3.6
150°-160°	189.5	2.5
160°-170°	111.3	1.5
170°-180°	36.2	0.5
0°-30°	1368.8	18.1
0°-40°	2202.7	29.2
0°-60°	3777.6	50.0
0°-90°	4729.1	62.6
90°-120°	1385.7	18.4
90°-150°	2482.5	32.9
90°-180°	2819.0	37.3
0°-180°	7548.6	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	9	19	21	22	8
95°	26	84	449	131	88	27
105°	88	130	609	1064	963	93
115°	155	193	466	1021	1171	154
125°	216	255	434	787	924	192
135°	253	302	428	648	749	195
145°	288	330	423	532	585	181
155°	328	354	410	466	485	151
165°	358	368	392	416	423	101
175°	373	374	376	382	381	35
180°	374	374	374	374	374	

TEST NUMBER: P1011423

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-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°	1.5	9.0	18.9	21.2	22.0
92.5°	11.4	45.4	140.8	48.0	40.1
95°	25.7	83.6	448.9	131.0	87.8
97.5°	40.9	95.8	690.4	329.2	180.2
100°	56.0	105.6	716.9	688.8	474.6
102.5°	71.9	117.0	667.7	922.4	751.7
105°	87.8	129.8	608.6	1064.4	962.9
107.5°	104.5	145.0	556.4	1126.8	1100.7
110°	122.6	160.5	513.2	1128.7	1179.4

TEST NUMBER: P1011423

CATALOG NUMBER: S123DIP-B1165D805UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.3	176.8	484.5	1086.0	1195.3
115°	155.2	193.4	465.6	1020.8	1171.1
117.5°	171.1	209.3	452.7	951.2	1118.1
120°	187.7	225.2	444.4	885.3	1048.4
122.5°	202.1	240.4	439.1	833.4	983.3
125°	215.7	254.7	434.5	787.3	923.5
127.5°	226.3	268.4	432.2	749.4	872.1
130°	236.2	280.4	430.0	714.6	829.7
132.5°	243.8	291.5	429.2	682.0	788.0
135°	252.8	301.6	428.5	648.3	748.7
137.5°	261.2	310.0	426.9	616.6	707.0
140°	269.5	317.6	426.2	585.6	663.1
142.5°	278.6	324.4	424.7	557.2	622.2
145°	288.4	330.4	423.2	531.8	585.2
147.5°	298.3	336.8	420.9	512.2	553.4
150°	308.1	342.2	417.9	494.7	526.1
152.5°	317.9	347.8	414.1	479.6	503.4
155°	327.8	353.5	409.5	465.6	485.2
157.5°	335.3	358.5	405.7	451.9	467.8
160°	344.4	362.6	401.2	439.4	451.2
162.5°	351.2	365.6	396.7	427.7	436.0
165°	358.1	368.2	392.1	416.0	423.2
167.5°	363.4	370.5	387.6	405.8	410.3
170°	367.9	371.6	383.0	396.6	398.9
172.5°	370.9	372.8	379.3	388.7	388.3
175°	373.2	373.6	376.2	381.5	380.8
177.5°	374.7	374.0	374.0	377.0	375.5
180°	374.0	374.0	374.0	374.0	374.0

(END OF REPORT)