

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: P1011421

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011421
REPORT IS A COMBINATION OF REPORTS P989565 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-F
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

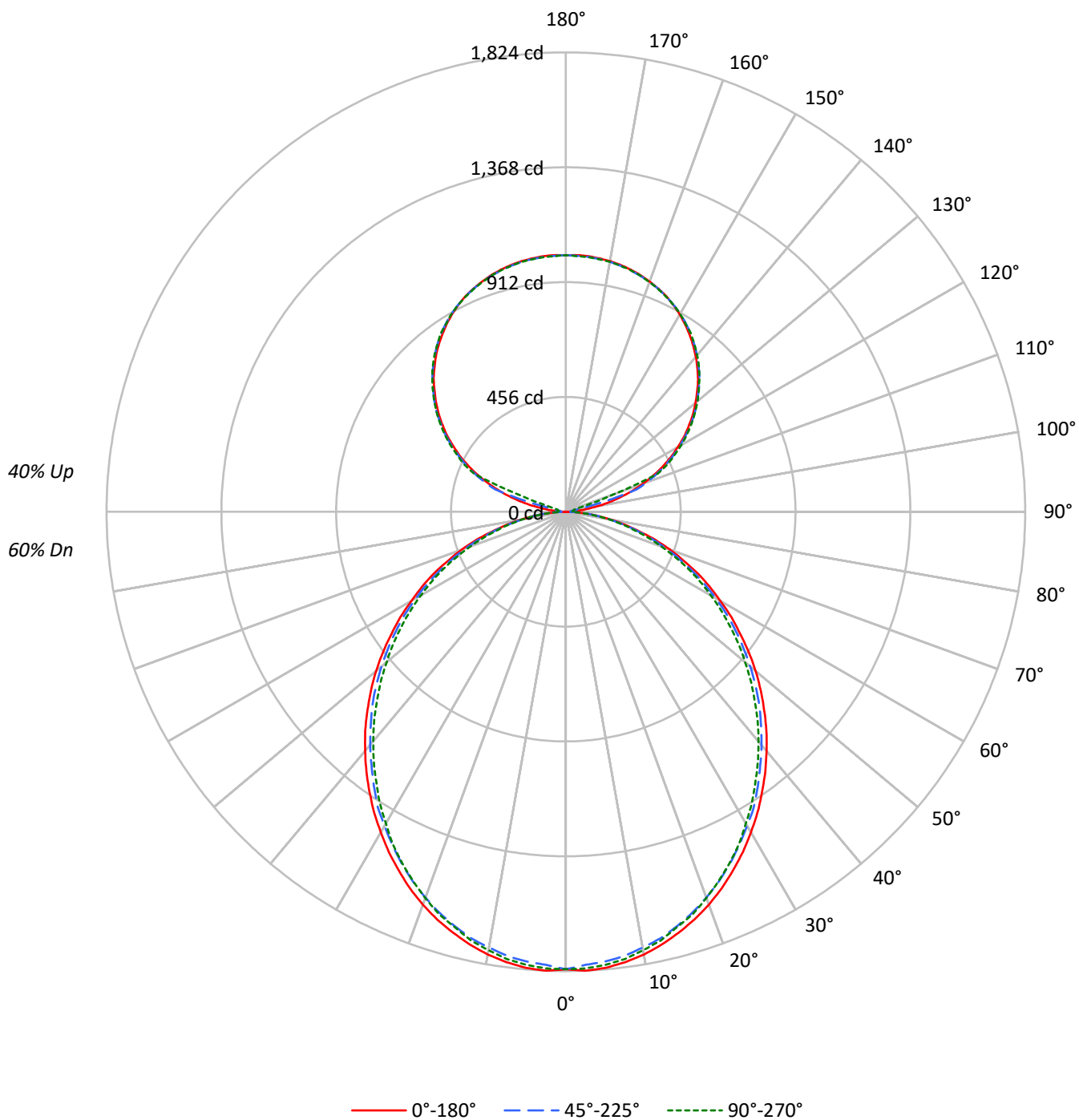
Lumens per Lamp: N/A
Luminaire Lumens: 7835.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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
RCR																	
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	55
2	91	83	77	72	85	78	73	68	68	64	61	59	56	53	51	49	47
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34
5	70	58	50	43	65	54	47	41	48	42	37	42	37	34	36	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.2
10°-20°	483.5	6.2
20°-30°	714.1	9.1
30°-40°	834.0	10.6
40°-50°	838.4	10.7
50°-60°	736.5	9.4
60°-70°	548.5	7.0
70°-80°	312.1	4.0
80°-90°	90.8	1.2
90°-100°	35.9	0.5
100°-110°	173.7	2.2
110°-120°	425.7	5.4
120°-130°	540.4	6.9
130°-140°	577.3	7.4
140°-150°	539.8	6.9
150°-160°	435.4	5.6
160°-170°	281.0	3.6
170°-180°	96.8	1.2
0°-30°	1368.8	17.5
0°-40°	2202.7	28.1
0°-60°	3777.6	48.2
0°-90°	4729.1	60.4
90°-120°	635.3	8.1
90°-150°	2292.7	29.3
90°-180°	3106.0	39.6
0°-180°	7835.0	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	8
95°	46	15	24	29	29	55
105°	226	234	166	32	33	239
115°	423	428	434	442	445	418
125°	596	602	606	607	609	533
135°	742	747	750	752	750	572
145°	857	862	864	865	865	536
155°	944	942	943	947	942	435
165°	995	993	992	998	993	281
175°	1019	1015	1016	1021	1015	97
180°	1019	1019	1019	1019	1019	

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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°	17.4	12.9	19.7	25.0	25.7
95°	46.2	15.1	23.5	28.8	28.8
97.5°	84.0	62.8	24.2	30.3	31.0
100°	127.9	143.1	25.0	31.0	31.8
102.5°	177.9	187.7	56.0	31.0	32.5
105°	225.6	233.9	165.8	31.8	33.3
107.5°	276.3	283.1	294.4	177.9	78.7
110°	327.0	333.0	341.4	316.4	208.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	375.4	380.7	389.1	395.9	394.4
115°	423.1	427.7	434.5	442.0	445.1
117.5°	470.1	475.3	479.1	485.2	485.9
120°	513.2	520.0	522.3	528.3	528.3
122.5°	557.1	562.4	565.4	569.2	570.0
125°	596.5	602.5	605.5	607.1	608.6
127.5°	635.8	641.9	645.7	647.9	646.4
130°	672.2	678.2	681.2	684.3	682.7
132.5°	707.0	713.0	715.3	718.3	716.1
135°	742.5	747.1	750.1	752.4	750.1
137.5°	772.8	778.9	780.4	784.2	782.7
140°	803.1	807.6	809.9	812.9	811.4
142.5°	831.1	835.6	837.9	840.2	837.9
145°	856.8	862.1	863.7	865.2	865.2
147.5°	881.8	885.6	887.1	888.6	884.8
150°	904.5	906.8	908.3	909.8	907.6
152.5°	925.0	925.7	926.5	929.5	925.7
155°	943.9	942.4	943.1	946.9	942.4
157.5°	959.0	959.0	958.3	962.8	956.8
160°	972.6	971.9	971.1	975.7	970.4
162.5°	985.5	983.2	982.5	987.8	983.2
165°	995.4	993.1	992.3	998.4	993.1
167.5°	1003.7	1000.7	1000.7	1006.7	1000.7
170°	1010.5	1007.5	1007.5	1013.5	1007.5
172.5°	1015.0	1011.3	1012.0	1018.1	1011.3
175°	1018.8	1015.0	1015.8	1021.1	1015.0
177.5°	1020.3	1016.6	1017.3	1023.4	1015.8
180°	1018.8	1018.8	1018.8	1018.8	1018.8

(END OF REPORT)