

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: P1011445

Luminaire Tested: S123DIP-B1165D805UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011445
REPORT IS A COMBINATION OF REPORTS P989607 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D805UB40-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

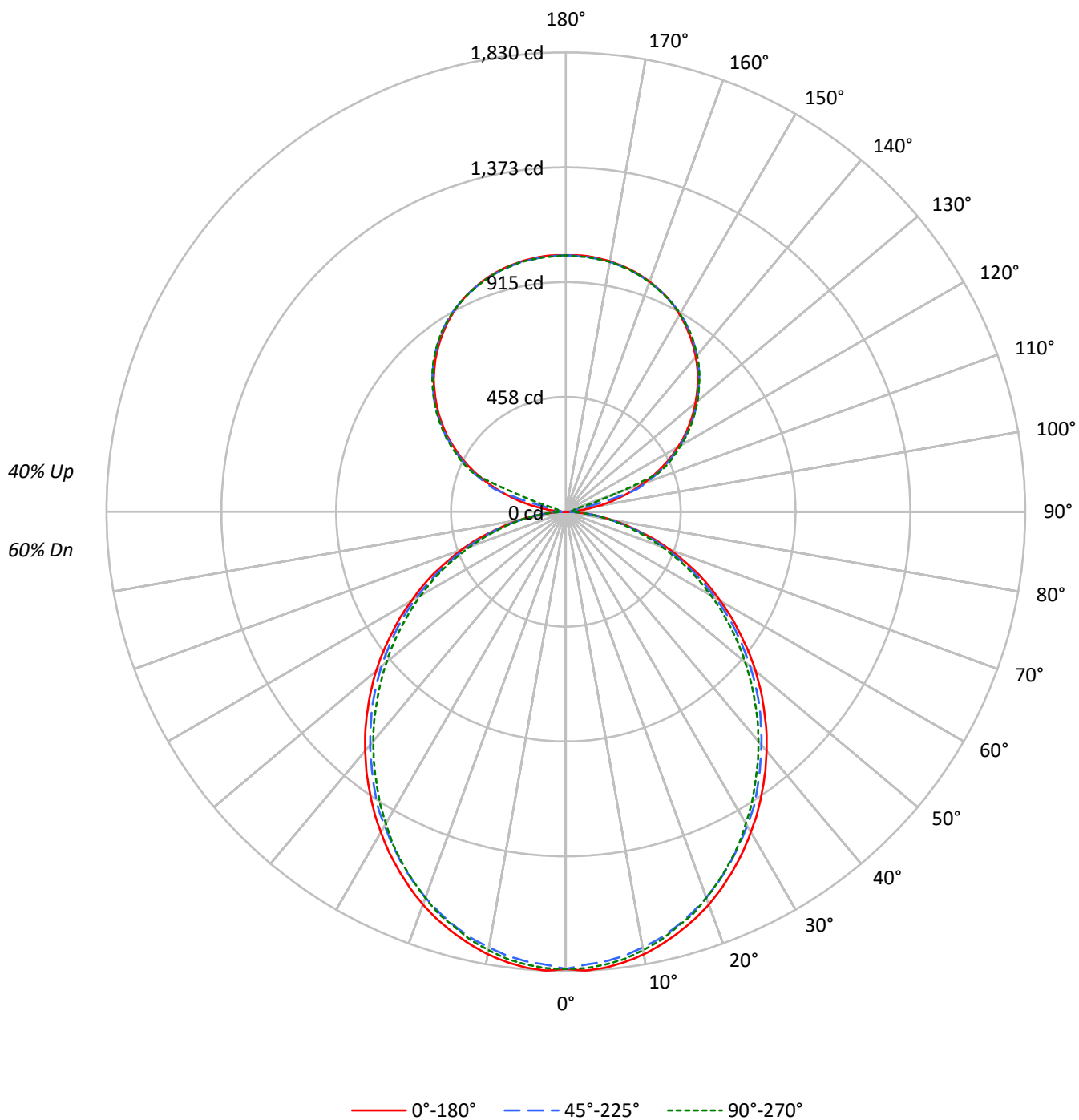
Lumens per Lamp: N/A
Luminaire Lumens: 7858.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	19609	19609	19609
5°	19657	18932	18903
10°	19482	18290	18103
15°	19211	17624	17231
20°	18900	16885	16366
25°	18500	16105	15444
30°	18059	15296	14471
35°	17598	14471	13506
40°	17117	13605	12557
45°	16586	12761	11565
50°	16047	11819	10569
55°	15354	10839	9560
60°	14642	9758	8486
65°	13972	8588	7366
70°	13008	7290	6059
75°	11617	5773	4703
80°	10033	4057	3326
85°	7828	2180	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16586 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	2.2
10°-20°	484.9	6.2
20°-30°	716.2	9.1
30°-40°	836.4	10.6
40°-50°	840.9	10.7
50°-60°	738.7	9.4
60°-70°	550.1	7.0
70°-80°	313.1	4.0
80°-90°	91.1	1.2
90°-100°	36.0	0.5
100°-110°	174.2	2.2
110°-120°	426.9	5.4
120°-130°	541.9	6.9
130°-140°	578.9	7.4
140°-150°	541.4	6.9
150°-160°	436.7	5.6
160°-170°	281.8	3.6
170°-180°	97.1	1.2
0°-30°	1372.8	17.5
0°-40°	2209.3	28.1
0°-60°	3788.8	48.2
0°-90°	4743.0	60.4
90°-120°	637.1	8.1
90°-150°	2299.4	29.3
90°-180°	3115.0	39.6
0°-180°	7858.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1823	1815	1798	1814	1811	173
15°	1736	1729	1709	1721	1712	489
25°	1576	1566	1546	1548	1543	726
35°	1363	1353	1333	1324	1316	853
45°	1117	1110	1090	1071	1064	862
55°	847	846	826	808	800	759
65°	578	570	554	542	537	570
75°	305	299	294	287	282	326
85°	82	78	78	75	75	87
90°	1	8	18	21	23	8
95°	46	15	24	29	29	55
105°	226	235	166	32	33	240
115°	424	429	436	443	446	419
125°	598	604	607	609	610	534
135°	745	749	752	755	752	573
145°	859	865	866	868	868	538
155°	947	945	946	950	945	436
165°	998	996	995	1001	996	282
175°	1022	1018	1019	1024	1018	97
180°	1022	1022	1022	1022	1022	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1821.7	1821.7	1821.7	1821.7	1821.7
2.5°	1829.5	1823.2	1806.0	1821.7	1820.1
5°	1823.2	1815.4	1798.2	1813.8	1810.7
7.5°	1809.1	1801.3	1784.1	1798.2	1796.6
10°	1790.3	1782.5	1762.1	1776.2	1773.1
12.5°	1765.3	1759.0	1740.2	1749.6	1748.1
15°	1735.5	1729.3	1708.9	1721.4	1712.0
17.5°	1702.6	1694.8	1674.4	1683.8	1680.7
20°	1665.0	1655.6	1635.3	1641.5	1636.8
22.5°	1622.7	1613.3	1593.0	1597.7	1591.4
25°	1575.8	1566.4	1546.0	1547.6	1542.9
27.5°	1527.2	1517.8	1495.9	1497.4	1492.7
30°	1473.9	1466.1	1444.2	1444.2	1433.2
32.5°	1420.7	1409.7	1394.1	1383.1	1378.4
35°	1362.7	1353.3	1333.0	1323.6	1315.7
37.5°	1304.8	1292.2	1271.9	1260.9	1256.2
40°	1243.7	1234.3	1212.4	1199.8	1193.6
42.5°	1182.6	1171.6	1149.7	1137.2	1130.9
45°	1116.8	1110.5	1090.2	1071.4	1063.6
47.5°	1052.6	1043.2	1024.4	1005.6	999.3
50°	986.8	979.0	958.6	941.4	932.0
52.5°	917.9	913.2	891.3	877.2	867.8
55°	847.4	845.8	825.5	808.2	800.4
57.5°	781.6	775.3	759.7	744.0	734.6
60°	709.6	708.0	689.2	675.1	667.3
62.5°	645.3	640.6	621.8	607.7	603.0
65°	578.0	570.2	554.5	542.0	537.3
67.5°	505.9	499.7	487.1	476.2	469.9
70°	441.7	432.3	422.9	412.0	404.1
72.5°	374.4	368.1	357.1	347.7	344.6
75°	305.4	299.2	294.5	286.6	281.9
77.5°	244.4	241.2	235.0	228.7	228.7
80°	184.8	180.1	177.0	175.4	175.4
82.5°	126.9	126.9	126.9	123.7	122.2
85°	81.5	78.3	78.3	75.2	75.2
87.5°	40.7	36.0	34.5	32.9	32.9
90°	0.8	8.4	18.2	21.3	22.8
92.5°	17.5	12.9	19.7	25.1	25.8
95°	46.3	15.2	23.5	28.8	28.8
97.5°	84.3	63.0	24.3	30.4	31.1
100°	128.3	143.5	25.1	31.1	31.9
102.5°	178.4	188.3	56.2	31.1	32.6
105°	226.2	234.6	166.2	31.9	33.4
107.5°	277.1	283.9	295.3	178.4	78.9
110°	327.9	334.0	342.4	317.3	208.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	376.5	381.8	390.2	397.0	395.5
115°	424.3	428.9	435.7	443.3	446.4
117.5°	471.4	476.7	480.5	486.6	487.4
120°	514.7	521.5	523.8	529.9	529.9
122.5°	558.7	564.0	567.1	570.9	571.6
125°	598.2	604.3	607.3	608.8	610.3
127.5°	637.7	643.7	647.5	649.8	648.3
130°	674.1	680.2	683.2	686.2	684.7
132.5°	709.0	715.1	717.4	720.4	718.1
135°	744.7	749.2	752.3	754.6	752.3
137.5°	775.1	781.1	782.7	786.4	784.9
140°	805.4	810.0	812.3	815.3	813.8
142.5°	833.5	838.1	840.3	842.6	840.3
145°	859.3	864.6	866.2	867.7	867.7
147.5°	884.4	888.2	889.7	891.2	887.4
150°	907.1	909.4	910.9	912.5	910.2
152.5°	927.6	928.4	929.2	932.2	928.4
155°	946.6	945.1	945.9	949.7	945.1
157.5°	961.8	961.8	961.0	965.6	959.5
160°	975.5	974.7	973.9	978.5	973.2
162.5°	988.4	986.1	985.3	990.6	986.1
165°	998.2	996.0	995.2	1001.3	996.0
167.5°	1006.6	1003.6	1003.6	1009.6	1003.6
170°	1013.4	1010.4	1010.4	1016.5	1010.4
172.5°	1018.0	1014.2	1014.9	1021.0	1014.2
175°	1021.8	1018.0	1018.7	1024.0	1018.0
177.5°	1023.3	1019.5	1020.3	1026.3	1018.7
180°	1021.8	1021.8	1021.8	1021.8	1021.8

(END OF REPORT)