

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: P1011403

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011403
REPORT IS A COMBINATION OF REPORTS P989547 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB40-4F0-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

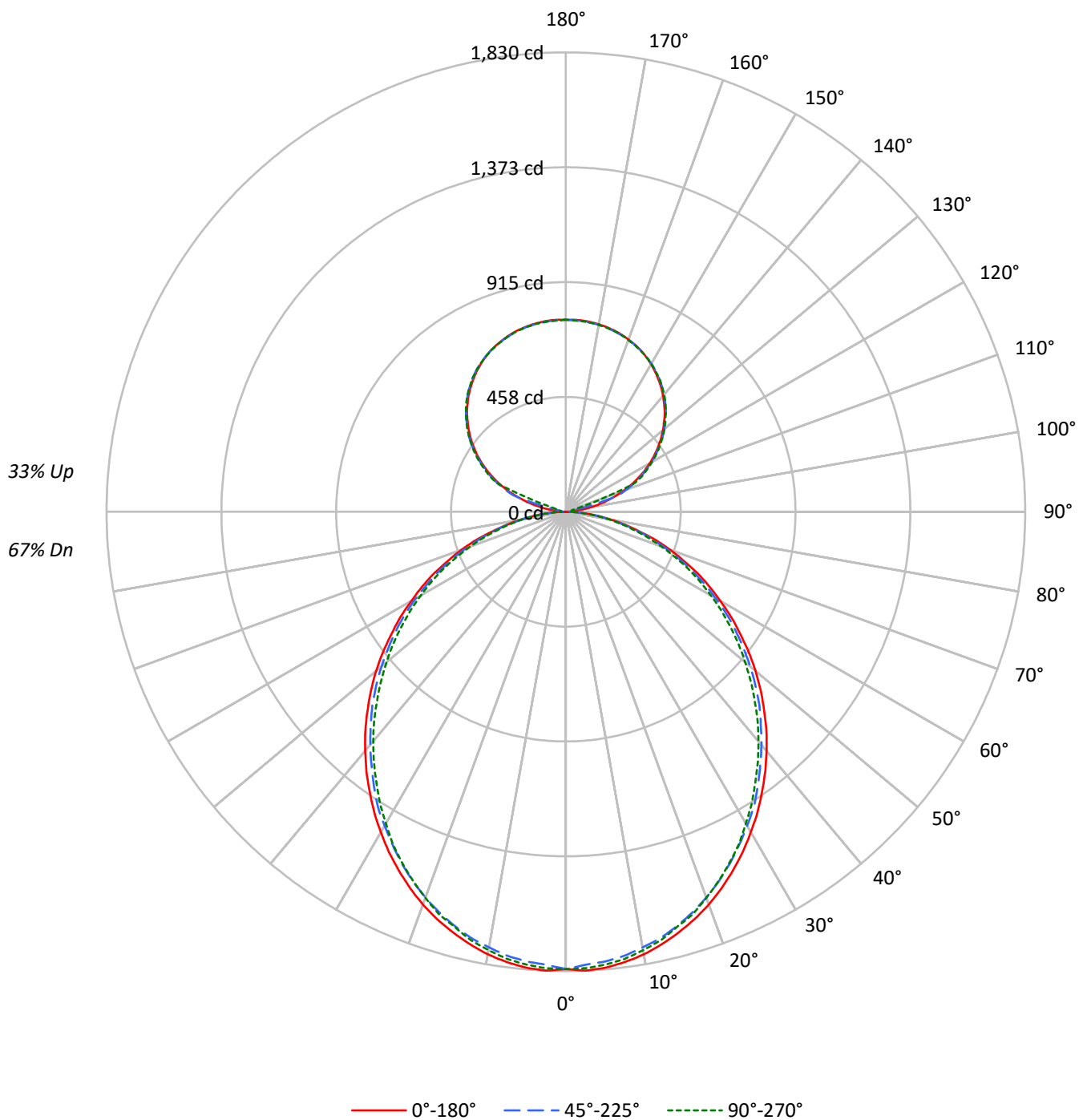
Lumens per Lamp: N/A
Luminaire Lumens: 7074.0 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	97	93	89	96	92	88	85	81	79	76	72	70	68	63	62	61
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	56	53	51
3	84	75	67	61	79	70	64	58	63	57	53	56	52	48	49	46	43
4	77	66	58	52	72	63	55	49	56	50	45	50	45	41	44	40	37
5	71	59	50	44	67	56	48	43	50	44	39	45	40	36	40	36	33
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25
8	56	44	36	30	53	41	34	29	38	31	27	34	29	25	30	26	23
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	21
10	49	37	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19

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	2.4
10°-20°	484.9	6.9
20°-30°	716.2	10.1
30°-40°	836.4	11.8
40°-50°	840.9	11.9
50°-60°	738.7	10.4
60°-70°	550.1	7.8
70°-80°	313.1	4.4
80°-90°	90.5	1.3
90°-100°	27.0	0.4
100°-110°	130.4	1.8
110°-120°	319.5	4.5
120°-130°	405.6	5.7
130°-140°	433.3	6.1
140°-150°	405.2	5.7
150°-160°	326.8	4.6
160°-170°	210.9	3.0
170°-180°	72.7	1.0
0°-30°	1372.8	19.4
0°-40°	2209.3	31.2
0°-60°	3788.8	53.6
0°-90°	4742.5	67.0
90°-120°	476.9	6.7
90°-150°	1721.0	24.3
90°-180°	2331.0	33.0
0°-180°	7074.0	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	6	14	16	17	8
95°	35	11	18	22	22	41
105°	169	176	124	24	25	180
115°	318	321	326	332	334	314
125°	448	452	454	456	457	400
135°	557	561	563	565	563	429
145°	643	647	648	649	649	403
155°	708	707	708	711	707	326
165°	747	746	745	749	746	211
175°	765	762	762	766	762	73
180°	765	765	765	765	765	

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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°	0.6	6.2	13.6	15.9	17.0
92.5°	13.1	9.7	14.8	18.7	19.3
95°	34.7	11.4	17.6	21.6	21.6
97.5°	63.1	47.2	18.2	22.7	23.3
100°	96.0	107.4	18.7	23.3	23.9
102.5°	133.5	140.9	42.0	23.3	24.4
105°	169.3	175.6	124.4	23.9	25.0
107.5°	207.4	212.5	221.0	133.5	59.1
110°	245.5	250.0	256.2	237.5	156.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.8	285.8	292.0	297.2	296.0
115°	317.6	321.0	326.1	331.8	334.1
117.5°	352.8	356.8	359.7	364.2	364.8
120°	385.2	390.3	392.0	396.6	396.6
122.5°	418.2	422.2	424.4	427.3	427.8
125°	447.7	452.3	454.5	455.7	456.8
127.5°	477.3	481.8	484.7	486.4	485.2
130°	504.5	509.1	511.4	513.6	512.5
132.5°	530.7	535.2	536.9	539.2	537.5
135°	557.4	560.8	563.1	564.8	563.1
137.5°	580.1	584.7	585.8	588.6	587.5
140°	602.8	606.2	608.0	610.2	609.1
142.5°	623.9	627.3	629.0	630.7	629.0
145°	643.2	647.2	648.3	649.4	649.4
147.5°	661.9	664.8	665.9	667.0	664.2
150°	679.0	680.7	681.8	683.0	681.2
152.5°	694.3	694.9	695.5	697.7	694.9
155°	708.5	707.4	708.0	710.8	707.4
157.5°	719.9	719.9	719.3	722.7	718.2
160°	730.1	729.5	729.0	732.4	728.4
162.5°	739.8	738.1	737.5	741.5	738.1
165°	747.2	745.5	744.9	749.4	745.5
167.5°	753.4	751.1	751.1	755.7	751.1
170°	758.5	756.2	756.2	760.8	756.2
172.5°	761.9	759.1	759.7	764.2	759.1
175°	764.8	761.9	762.5	766.5	761.9
177.5°	765.9	763.1	763.6	768.2	762.5
180°	764.8	764.8	764.8	764.8	764.8

(END OF REPORT)