

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: P1011405

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011405
REPORT IS A COMBINATION OF REPORTS P989549 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-F4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

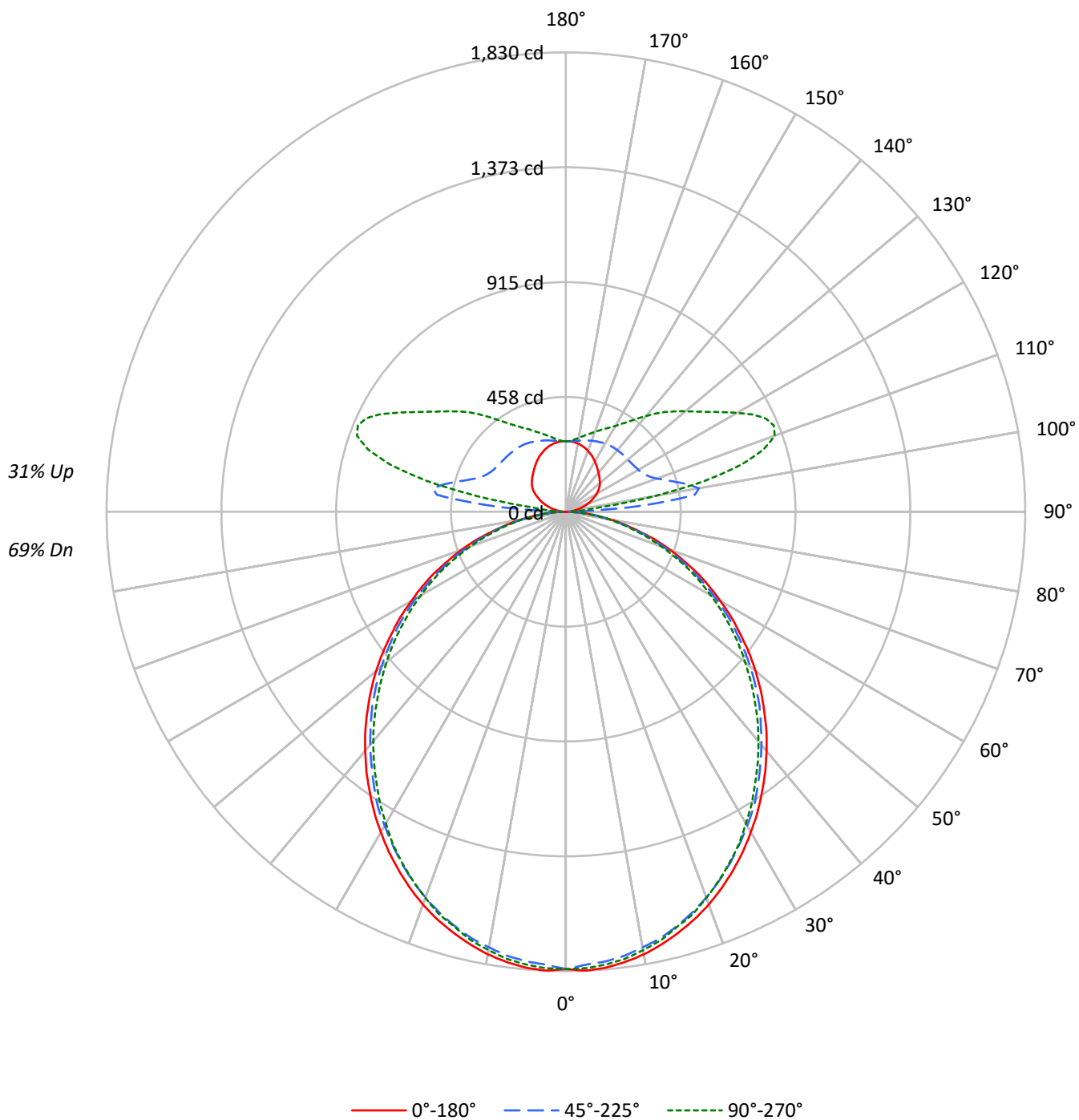
Lumens per Lamp: N/A
Luminaire Lumens: 6858.9 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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
RCR																	
0	112	112	112	112	106	106	106	106	94	94	94		83	83	83		74
1	102	98	93	90	96	92	89	85	82	80	77		73	71	69		65
2	93	85	79	73	87	81	75	70	72	68	64		64	61	58		57
3	85	75	67	61	80	71	64	59	64	58	54		57	53	49		51
4	78	66	58	52	73	63	56	50	57	51	46		51	46	42		45
5	71	59	51	45	67	56	49	43	51	44	40		46	40	36		41
6	66	53	45	39	62	51	43	37	46	39	35		41	36	32		37
7	61	48	40	34	57	46	38	33	42	35	31		38	32	28		34
8	57	44	36	30	53	42	34	29	38	32	27		34	29	25		31
9	53	40	32	27	50	38	31	26	35	29	25		32	27	23		29
10	49	37	29	24	47	35	28	24	32	26	22		29	24	21		27

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	2.5
10°-20°	484.9	7.1
20°-30°	716.2	10.4
30°-40°	836.4	12.2
40°-50°	840.9	12.3
50°-60°	738.7	10.8
60°-70°	550.1	8.0
70°-80°	313.1	4.6
80°-90°	90.6	1.3
90°-100°	159.5	2.3
100°-110°	445.8	6.5
110°-120°	434.7	6.3
120°-130°	346.2	5.0
130°-140°	273.3	4.0
140°-150°	203.9	3.0
150°-160°	142.2	2.1
160°-170°	83.5	1.2
170°-180°	27.2	0.4
0°-30°	1372.8	20.0
0°-40°	2209.3	32.2
0°-60°	3788.8	55.2
0°-90°	4742.6	69.1
90°-120°	1040.1	15.2
90°-150°	1863.4	27.2
90°-180°	2116.0	30.9
0°-180°	6858.9	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	7	14	16	16	7
95°	19	63	337	98	66	20
105°	66	97	457	799	723	70
115°	116	145	350	766	879	115
125°	162	191	326	591	693	144
135°	190	226	322	487	562	147
145°	216	248	318	399	439	136
155°	246	265	307	349	364	113
165°	269	276	294	312	318	76
175°	280	280	282	286	286	27
180°	281	281	281	281	281	

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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°	1.1	6.8	14.2	15.9	16.5
92.5°	8.5	34.1	105.7	36.1	30.1
95°	19.3	62.8	337.0	98.3	65.9
97.5°	30.7	71.9	518.2	247.2	135.2
100°	42.0	79.2	538.1	517.0	356.3
102.5°	54.0	87.8	501.2	692.4	564.2
105°	65.9	97.4	456.8	798.9	722.8
107.5°	78.4	108.8	417.6	845.8	826.2
110°	92.1	120.4	385.3	847.2	885.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	132.6	363.7	815.1	897.2
115°	116.5	145.2	349.5	766.2	879.0
117.5°	128.4	157.1	339.8	714.0	839.3
120°	140.9	169.0	333.5	664.5	787.0
122.5°	151.7	180.4	329.6	625.6	738.1
125°	161.9	191.2	326.2	591.0	693.2
127.5°	169.9	201.4	324.5	562.6	654.6
130°	177.3	210.6	322.7	536.4	622.8
132.5°	183.0	218.8	322.2	512.0	591.5
135°	189.8	226.4	321.6	486.7	562.0
137.5°	196.0	232.7	320.5	462.8	530.7
140°	202.3	238.4	319.9	439.5	497.8
142.5°	209.1	243.4	318.8	418.2	467.1
145°	216.5	248.0	317.6	399.2	439.2
147.5°	223.9	252.8	315.9	384.4	415.4
150°	231.3	256.8	313.7	371.3	394.9
152.5°	238.7	261.1	310.8	360.0	377.9
155°	246.0	265.4	307.4	349.4	364.2
157.5°	251.7	269.0	304.6	339.2	351.2
160°	258.5	272.2	301.2	329.8	338.7
162.5°	263.7	274.4	297.7	321.0	327.3
165°	268.8	276.4	294.3	312.2	317.6
167.5°	272.7	278.2	290.9	304.5	308.0
170°	276.2	279.0	287.5	297.8	299.5
172.5°	278.4	279.8	284.7	291.8	291.5
175°	280.1	280.4	282.4	286.4	285.8
177.5°	281.3	280.7	280.7	283.0	281.8
180°	280.7	280.7	280.7	280.7	280.7

(END OF REPORT)