

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: P1011363

Luminaire Tested: S123DIP-B1165D365UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011363
REPORT IS A COMBINATION OF REPORTS P989489 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB40-4F0-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

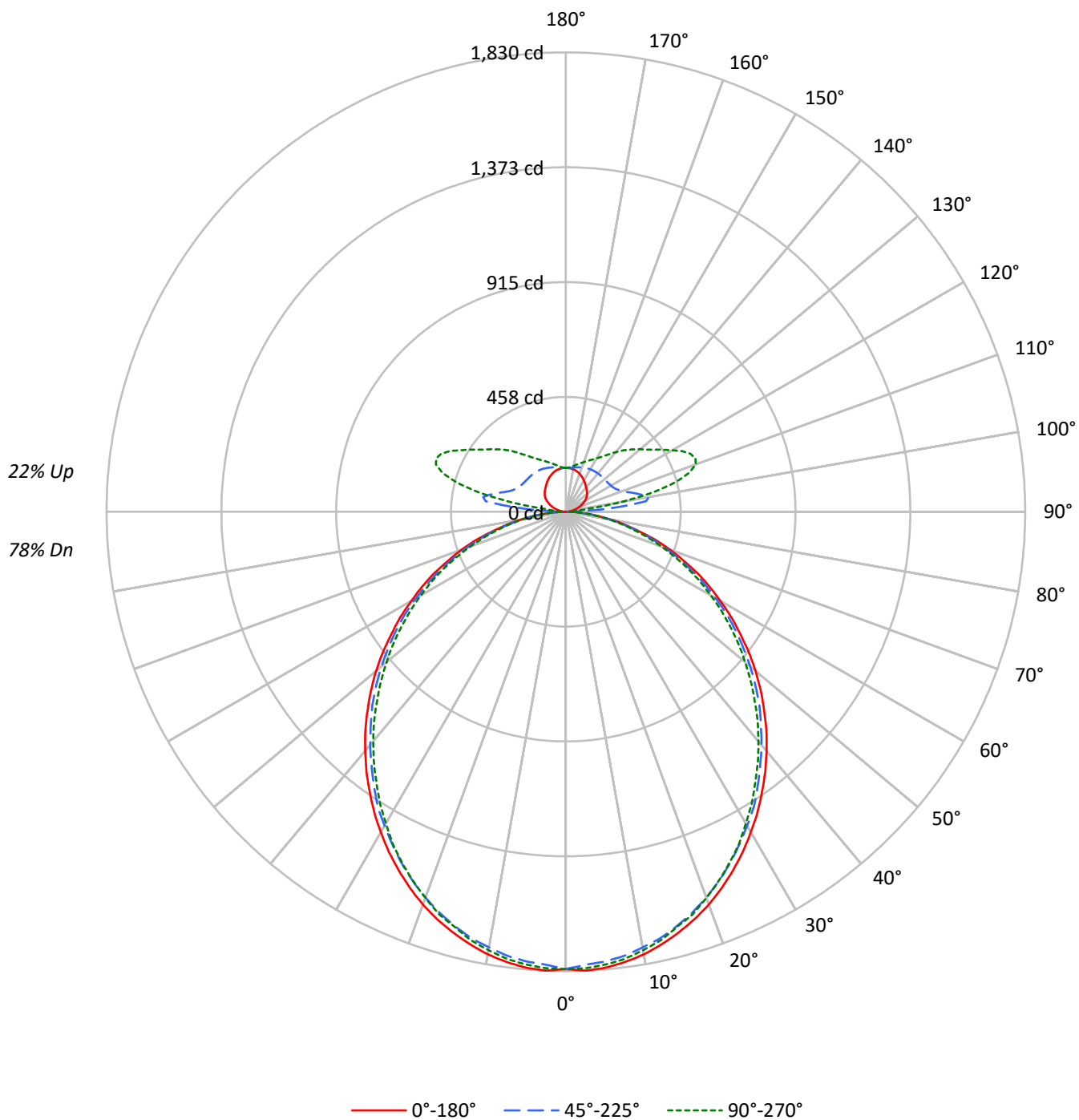
Lumens per Lamp: N/A
Luminaire Lumens: 6059.1 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	71	69
2	95	87	80	75	90	83	77	72	76	71	67	70	66	63	64	61	58
3	86	76	69	62	82	73	66	61	67	61	57	62	57	53	56	53	50
4	79	68	59	53	75	65	57	51	60	53	48	55	50	46	50	46	43
5	73	61	52	46	69	58	50	44	54	47	42	49	44	40	45	41	37
6	67	54	46	40	64	52	44	39	48	42	37	45	39	35	41	37	33
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29
8	58	45	37	31	55	43	36	30	40	34	29	37	32	28	35	30	26
9	54	41	33	28	52	40	32	27	37	31	26	34	29	25	32	27	24
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	22

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	2.8
10°-20°	484.9	8.0
20°-30°	716.2	11.8
30°-40°	836.4	13.8
40°-50°	840.9	13.9
50°-60°	738.7	12.2
60°-70°	550.1	9.1
70°-80°	313.1	5.2
80°-90°	90.0	1.5
90°-100°	99.3	1.6
100°-110°	277.5	4.6
110°-120°	270.6	4.5
120°-130°	215.4	3.6
130°-140°	170.1	2.8
140°-150°	126.9	2.1
150°-160°	88.5	1.5
160°-170°	52.0	0.9
170°-180°	16.9	0.3
0°-30°	1372.8	22.7
0°-40°	2209.3	36.5
0°-60°	3788.8	62.5
0°-90°	4742.0	78.3
90°-120°	647.3	10.7
90°-150°	1159.7	19.1
90°-180°	1317.0	21.7
0°-180°	6059.1	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	4	9	10	10	6
95°	12	39	210	61	41	13
105°	41	61	284	497	450	44
115°	72	90	218	477	547	72
125°	101	119	203	368	431	90
135°	118	141	200	303	350	91
145°	135	154	198	248	273	84
155°	153	165	191	218	227	70
165°	167	172	183	194	198	47
175°	174	174	176	178	178	17
180°	175	175	175	175	175	

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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°	0.7	4.2	8.8	9.9	10.3
92.5°	5.3	21.2	65.8	22.4	18.7
95°	12.0	39.1	209.7	61.2	41.0
97.5°	19.1	44.7	322.5	153.8	84.2
100°	26.2	49.3	334.9	321.8	221.7
102.5°	33.6	54.6	311.9	430.9	351.1
105°	41.0	60.6	284.3	497.2	449.8
107.5°	48.8	67.7	259.9	526.4	514.2
110°	57.3	75.0	239.8	527.2	550.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.1	82.6	226.3	507.3	558.4
115°	72.5	90.4	217.5	476.8	547.1
117.5°	79.9	97.8	211.5	444.3	522.3
120°	87.7	105.2	207.6	413.6	489.8
122.5°	94.4	112.2	205.1	389.4	459.4
125°	100.8	119.0	203.0	367.8	431.4
127.5°	105.7	125.4	201.9	350.1	407.4
130°	110.3	131.0	200.9	333.8	387.6
132.5°	113.9	136.1	200.5	318.6	368.1
135°	118.1	140.9	200.2	302.9	349.7
137.5°	122.0	144.8	199.4	288.0	330.3
140°	125.9	148.4	199.1	273.5	309.8
142.5°	130.1	151.6	198.4	260.2	290.7
145°	134.7	154.4	197.7	248.4	273.4
147.5°	139.3	157.4	196.6	239.2	258.5
150°	143.9	159.8	195.2	231.1	245.8
152.5°	148.5	162.5	193.4	224.0	235.2
155°	153.1	165.1	191.3	217.5	226.7
157.5°	156.7	167.4	189.5	211.1	218.5
160°	160.9	169.4	187.4	205.2	210.8
162.5°	164.1	170.8	185.3	199.8	203.7
165°	167.3	172.0	183.2	194.3	197.7
167.5°	169.7	173.1	181.1	189.5	191.7
170°	171.9	173.6	178.9	185.3	186.4
172.5°	173.3	174.2	177.2	181.6	181.4
175°	174.3	174.5	175.8	178.2	177.9
177.5°	175.0	174.7	174.7	176.1	175.4
180°	174.7	174.7	174.7	174.7	174.7

(END OF REPORT)