

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: P1011353

Luminaire Tested: S123DIP-B1165D365UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011353
REPORT IS A COMBINATION OF REPORTS P989479 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

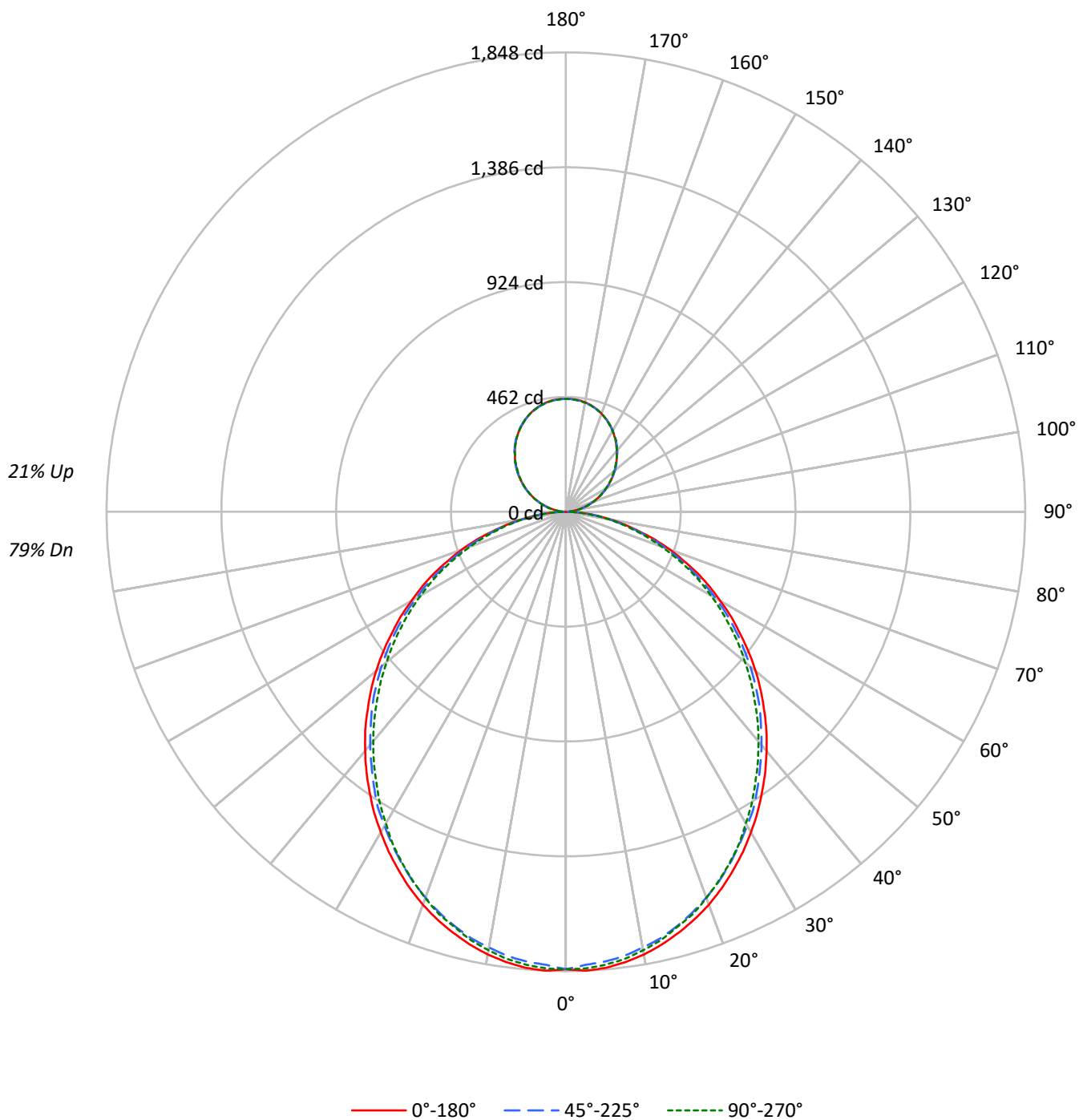
Lumens per Lamp: N/A
Luminaire Lumens: 6049.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	100	100	100	91	91	91	83	83	83
1	104	100	96	92	99	95	92	88	87	85	82	80	78	76	73	72	70
2	95	87	81	75	90	83	78	73	77	72	68	70	67	63	64	61	59
3	87	77	69	63	82	73	66	61	68	62	57	62	57	53	57	53	50
4	79	68	60	53	75	65	58	52	60	54	49	55	50	46	51	47	43
5	73	61	52	46	69	58	50	45	54	47	42	50	44	40	46	41	38
6	67	55	46	40	64	53	45	39	49	42	37	45	39	35	42	37	33
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	29
8	58	45	37	31	55	44	36	31	41	34	29	38	32	28	35	30	26
9	54	41	33	28	52	40	33	28	37	31	26	35	29	25	32	28	24
10	51	38	30	25	49	37	30	25	34	28	24	32	27	23	30	25	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19807	19807	19807
5°	19856	19123	19094
10°	19680	18476	18287
15°	19406	17803	17406
20°	19092	17055	16532
25°	18686	16267	15600
30°	18242	15451	14618
35°	17776	14618	13643
40°	17290	13742	12683
45°	16754	12889	11681
50°	16209	11939	10675
55°	15510	10948	9656
60°	14789	9857	8571
65°	14113	8675	7440
70°	13140	7364	6120
75°	11735	5832	4751
80°	10136	4098	3361
85°	7905	2203	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	2.9
10°-20°	489.8	8.1
20°-30°	723.4	12.0
30°-40°	844.9	14.0
40°-50°	849.4	14.0
50°-60°	746.1	12.3
60°-70°	555.7	9.2
70°-80°	316.2	5.2
80°-90°	90.9	1.5
90°-100°	29.3	0.5
100°-110°	88.5	1.5
110°-120°	150.7	2.5
120°-130°	198.3	3.3
130°-140°	222.9	3.7
140°-150°	219.1	3.6
150°-160°	184.5	3.0
160°-170°	122.8	2.0
170°-180°	43.0	0.7
0°-30°	1386.7	22.9
0°-40°	2231.6	36.9
0°-60°	3827.2	63.3
0°-90°	4790.0	79.2
90°-120°	268.5	4.4
90°-150°	908.8	15.0
90°-180°	1259.0	20.8
0°-180°	6049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1842	1834	1816	1832	1829	175
15°	1753	1747	1726	1739	1729	494
25°	1592	1582	1562	1563	1558	733
35°	1376	1367	1346	1337	1329	861
45°	1128	1122	1101	1082	1074	871
55°	856	854	834	816	808	767
65°	584	576	560	547	543	576
75°	308	302	298	290	285	330
85°	82	79	79	76	76	88
90°	0	4	9	10	11	7
95°	21	24	26	28	28	23
105°	80	81	84	84	85	86
115°	152	153	152	152	152	150
125°	222	223	222	221	220	198
135°	288	290	290	288	288	222
145°	350	350	351	351	350	218
155°	400	400	400	402	399	184
165°	436	435	435	437	434	123
175°	453	452	452	454	452	43
180°	454	454	454	454	454	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1848.0	1841.7	1824.3	1840.1	1838.5
5°	1841.7	1833.8	1816.4	1832.2	1829.0
7.5°	1827.5	1819.5	1802.1	1816.4	1814.8
10°	1808.5	1800.6	1780.0	1794.2	1791.1
12.5°	1783.2	1776.8	1757.8	1767.3	1765.7
15°	1753.1	1746.8	1726.2	1738.9	1729.4
17.5°	1719.9	1712.0	1691.4	1700.9	1697.7
20°	1681.9	1672.4	1651.8	1658.2	1653.4
22.5°	1639.2	1629.7	1609.1	1613.9	1607.5
25°	1591.7	1582.2	1561.6	1563.2	1558.5
27.5°	1542.7	1533.2	1511.0	1512.6	1507.8
30°	1488.9	1481.0	1458.8	1458.8	1447.7
32.5°	1435.1	1424.0	1408.2	1397.1	1392.3
35°	1376.5	1367.0	1346.5	1337.0	1329.1
37.5°	1318.0	1305.3	1284.8	1273.7	1268.9
40°	1256.3	1246.8	1224.6	1212.0	1205.6
42.5°	1194.6	1183.5	1161.3	1148.7	1142.4
45°	1128.1	1121.8	1101.2	1082.2	1074.3
47.5°	1063.2	1053.8	1034.8	1015.8	1009.5
50°	996.8	988.9	968.3	950.9	941.4
52.5°	927.2	922.4	900.3	886.0	876.5
55°	856.0	854.4	833.8	816.4	808.5
57.5°	789.5	783.2	767.4	751.6	742.1
60°	716.7	715.2	696.2	681.9	674.0
62.5°	651.9	647.1	628.1	613.9	609.2
65°	583.8	575.9	560.1	547.4	542.7
67.5°	511.1	504.7	492.1	481.0	474.7
70°	446.2	436.7	427.2	416.1	408.2
72.5°	378.1	371.8	360.7	351.3	348.1
75°	308.5	302.2	297.5	289.5	284.8
77.5°	246.8	243.7	237.3	231.0	231.0
80°	186.7	182.0	178.8	177.2	177.2
82.5°	128.2	128.2	128.2	125.0	123.4
85°	82.3	79.1	79.1	75.9	75.9
87.5°	41.1	36.4	34.8	33.2	33.2
90°	0.4	3.9	8.6	10.0	10.7
92.5°	10.7	12.9	15.0	16.1	15.3
95°	21.1	23.6	26.4	27.8	27.8
97.5°	34.6	36.4	38.6	40.3	40.0
100°	48.5	50.7	52.5	53.5	54.3
102.5°	64.6	65.7	68.2	69.2	68.9
105°	80.3	81.0	84.2	84.2	85.0
107.5°	98.9	99.2	100.7	101.7	101.4
110°	116.0	116.7	117.4	118.9	118.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	133.9	134.2	134.2	136.0	136.0
115°	151.7	152.8	152.1	152.4	152.1
117.5°	169.9	170.3	169.5	169.5	168.5
120°	186.7	188.8	187.0	186.7	186.0
122.5°	204.2	205.6	204.9	203.8	202.7
125°	222.0	223.1	222.4	220.9	219.5
127.5°	238.4	240.6	239.9	237.7	236.3
130°	254.9	257.7	256.6	255.2	252.7
132.5°	271.3	274.1	273.4	271.6	269.9
135°	288.1	290.2	289.8	288.4	287.7
137.5°	303.4	305.2	306.3	304.5	303.4
140°	319.5	321.3	321.6	321.3	318.8
142.5°	334.1	335.9	336.6	336.2	334.5
145°	349.5	350.2	351.2	350.9	349.5
147.5°	362.7	364.1	365.2	365.2	363.0
150°	376.6	377.3	378.0	378.0	375.9
152.5°	388.0	389.1	389.4	390.1	388.4
155°	400.1	400.1	400.5	401.9	399.4
157.5°	410.5	410.1	410.5	411.9	409.8
160°	420.1	419.4	419.4	421.2	419.8
162.5°	428.7	427.6	428.0	429.8	427.3
165°	435.8	434.8	434.8	436.9	434.4
167.5°	441.9	440.5	440.8	443.0	440.8
170°	446.9	445.5	445.5	448.0	445.5
172.5°	450.8	449.4	449.4	451.5	449.0
175°	453.3	451.9	451.9	454.0	451.5
177.5°	454.7	453.3	453.3	455.5	453.0
180°	454.4	454.4	454.4	454.4	454.4

(END OF REPORT)