

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: P1011335

Luminaire Tested: S123DIP-B1165D365UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011335
REPORT IS A COMBINATION OF REPORTS P989446 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

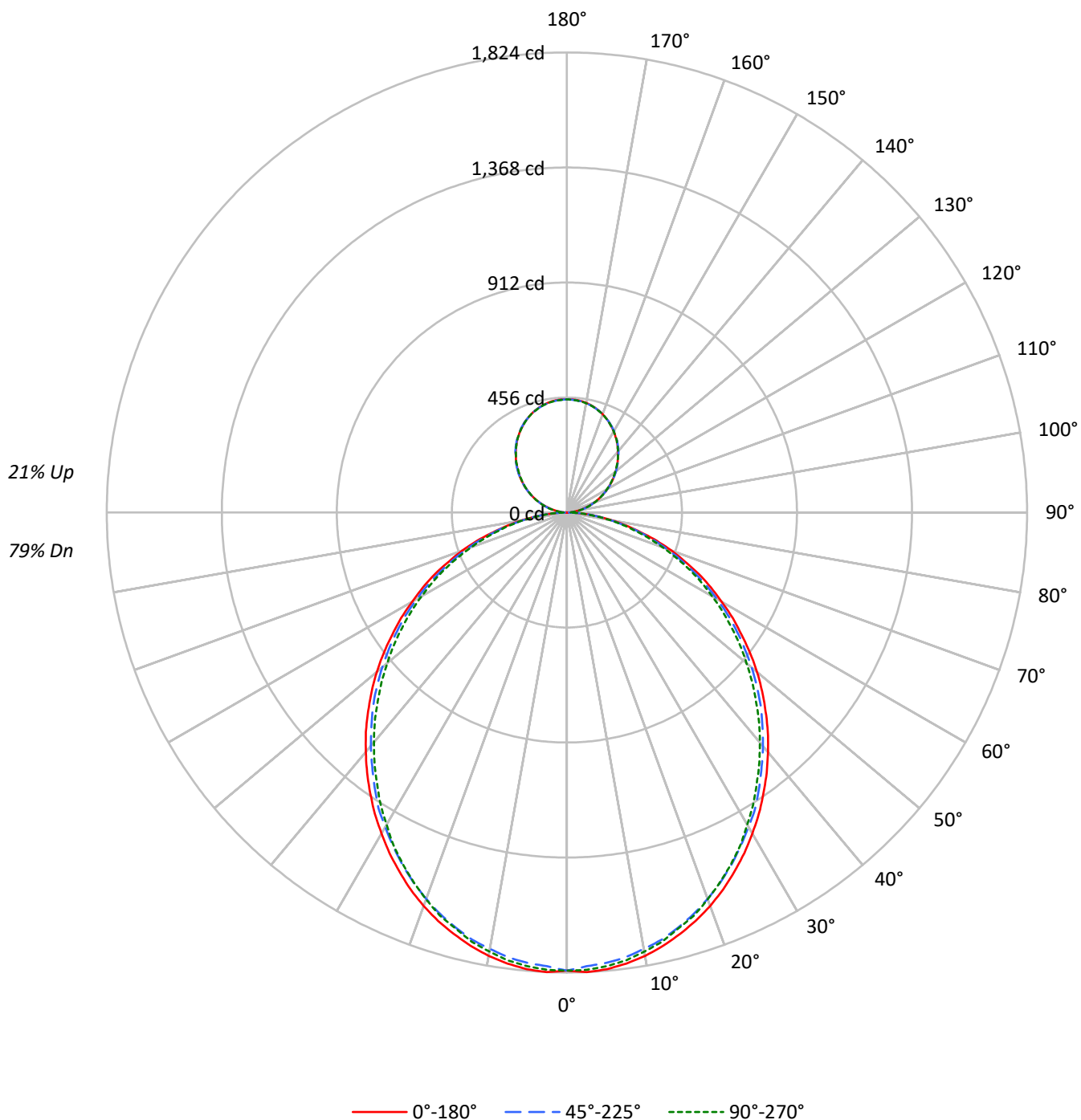
Lumens per Lamp: N/A
Luminaire Lumens: 5971.0 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	66	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°	19550	19550	19550
5°	19600	18876	18848
10°	19425	18237	18050
15°	19155	17572	17181
20°	18845	16834	16318
25°	18444	16057	15398
30°	18006	15251	14429
35°	17547	14428	13467
40°	17066	13565	12519
45°	16537	12723	11530
50°	15999	11785	10537
55°	15309	10807	9531
60°	14599	9730	8461
65°	13931	8563	7344
70°	12969	7269	6041
75°	11583	5755	4690
80°	10006	4046	3317
85°	7800	2175	1662

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16537 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	2.9
10°-20°	483.5	8.1
20°-30°	714.1	12.0
30°-40°	834.0	14.0
40°-50°	838.4	14.0
50°-60°	736.5	12.3
60°-70°	548.5	9.2
70°-80°	312.1	5.2
80°-90°	89.7	1.5
90°-100°	28.9	0.5
100°-110°	87.4	1.5
110°-120°	148.8	2.5
120°-130°	195.8	3.3
130°-140°	220.0	3.7
140°-150°	216.3	3.6
150°-160°	182.1	3.1
160°-170°	121.2	2.0
170°-180°	42.5	0.7
0°-30°	1368.8	22.9
0°-40°	2202.7	36.9
0°-60°	3777.6	63.3
0°-90°	4728.0	79.2
90°-120°	265.1	4.4
90°-150°	897.2	15.0
90°-180°	1243.0	20.8
0°-180°	5971.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1818	1810	1793	1808	1805	172
15°	1730	1724	1704	1716	1707	488
25°	1571	1562	1541	1543	1538	724
35°	1359	1349	1329	1320	1312	850
45°	1114	1107	1087	1068	1060	860
55°	845	843	823	806	798	757
65°	576	568	553	540	536	569
75°	304	298	294	286	281	325
85°	81	78	78	75	75	87
90°	0	4	8	10	11	7
95°	21	23	26	28	28	23
105°	79	80	83	83	84	85
115°	150	151	150	150	150	148
125°	219	220	220	218	217	195
135°	284	286	286	285	284	219
145°	345	346	347	346	345	216
155°	395	395	395	397	394	182
165°	430	429	429	431	429	121
175°	448	446	446	448	446	43
180°	449	449	449	449	449	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.3	1816.3	1816.3	1816.3	1816.3
2.5°	1824.1	1817.9	1800.7	1816.3	1814.7
5°	1817.9	1810.0	1792.9	1808.5	1805.4
7.5°	1803.8	1796.0	1778.8	1792.9	1791.3
10°	1785.1	1777.2	1756.9	1771.0	1767.9
12.5°	1760.1	1753.8	1735.1	1744.5	1742.9
15°	1730.4	1724.1	1703.8	1716.3	1707.0
17.5°	1697.6	1689.8	1669.5	1678.9	1675.7
20°	1660.1	1650.7	1630.4	1636.7	1632.0
22.5°	1618.0	1608.6	1588.3	1593.0	1586.7
25°	1571.1	1561.7	1541.4	1543.0	1538.3
27.5°	1522.7	1513.3	1491.5	1493.0	1488.3
30°	1469.6	1461.8	1439.9	1439.9	1429.0
32.5°	1416.5	1405.6	1389.9	1379.0	1374.3
35°	1358.7	1349.3	1329.0	1319.7	1311.9
37.5°	1300.9	1288.4	1268.1	1257.2	1252.5
40°	1240.0	1230.6	1208.8	1196.3	1190.0
42.5°	1179.1	1168.2	1146.3	1133.8	1127.6
45°	1113.5	1107.3	1087.0	1068.2	1060.4
47.5°	1049.5	1040.1	1021.4	1002.6	996.4
50°	983.9	976.1	955.8	938.6	929.2
52.5°	915.2	910.5	888.6	874.6	865.2
55°	844.9	843.3	823.0	805.9	798.0
57.5°	779.3	773.1	757.4	741.8	732.5
60°	707.5	705.9	687.2	673.1	665.3
62.5°	643.4	638.7	620.0	606.0	601.3
65°	576.3	568.5	552.9	540.4	535.7
67.5°	504.4	498.2	485.7	474.8	468.5
70°	440.4	431.0	421.7	410.7	402.9
72.5°	373.3	367.0	356.1	346.7	343.6
75°	304.5	298.3	293.6	285.8	281.1
77.5°	243.6	240.5	234.3	228.0	228.0
80°	184.3	179.6	176.5	174.9	174.9
82.5°	126.5	126.5	126.5	123.4	121.8
85°	81.2	78.1	78.1	75.0	75.0
87.5°	40.6	35.9	34.4	32.8	32.8
90°	0.4	3.9	8.5	9.9	10.6
92.5°	10.6	12.7	14.8	15.9	15.2
95°	20.8	23.3	26.1	27.5	27.5
97.5°	34.2	35.9	38.1	39.8	39.5
100°	47.9	50.0	51.8	52.9	53.6
102.5°	63.8	64.8	67.3	68.4	68.0
105°	79.3	80.0	83.2	83.2	83.9
107.5°	97.6	98.0	99.4	100.4	100.1
110°	114.5	115.2	115.9	117.4	116.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.2	132.5	132.5	134.3	134.3
115°	149.8	150.8	150.1	150.5	150.1
117.5°	167.7	168.1	167.4	167.4	166.3
120°	184.3	186.4	184.7	184.3	183.6
122.5°	201.6	203.0	202.3	201.2	200.2
125°	219.2	220.3	219.6	218.1	216.7
127.5°	235.4	237.5	236.8	234.7	233.3
130°	251.6	254.4	253.4	252.0	249.5
132.5°	267.8	270.7	269.9	268.2	266.4
135°	284.4	286.5	286.2	284.8	284.0
137.5°	299.6	301.3	302.4	300.6	299.6
140°	315.4	317.2	317.5	317.2	314.7
142.5°	329.9	331.6	332.3	332.0	330.2
145°	345.0	345.7	346.8	346.4	345.0
147.5°	358.1	359.5	360.5	360.5	358.4
150°	371.8	372.5	373.2	373.2	371.1
152.5°	383.1	384.1	384.5	385.2	383.4
155°	395.1	395.1	395.4	396.8	394.4
157.5°	405.3	404.9	405.3	406.7	404.6
160°	414.8	414.1	414.1	415.8	414.4
162.5°	423.2	422.2	422.5	424.3	421.8
165°	430.3	429.2	429.2	431.4	428.9
167.5°	436.3	434.9	435.2	437.3	435.2
170°	441.2	439.8	439.8	442.3	439.8
172.5°	445.1	443.7	443.7	445.8	443.3
175°	447.6	446.2	446.2	448.3	445.8
177.5°	449.0	447.6	447.6	449.7	447.2
180°	448.6	448.6	448.6	448.6	448.6

(END OF REPORT)