

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: P1011378

Luminaire Tested: S123DIP-B1165D585UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011378
REPORT IS A COMBINATION OF REPORTS P989507 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB27-4F0-XX-W2A-F4
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

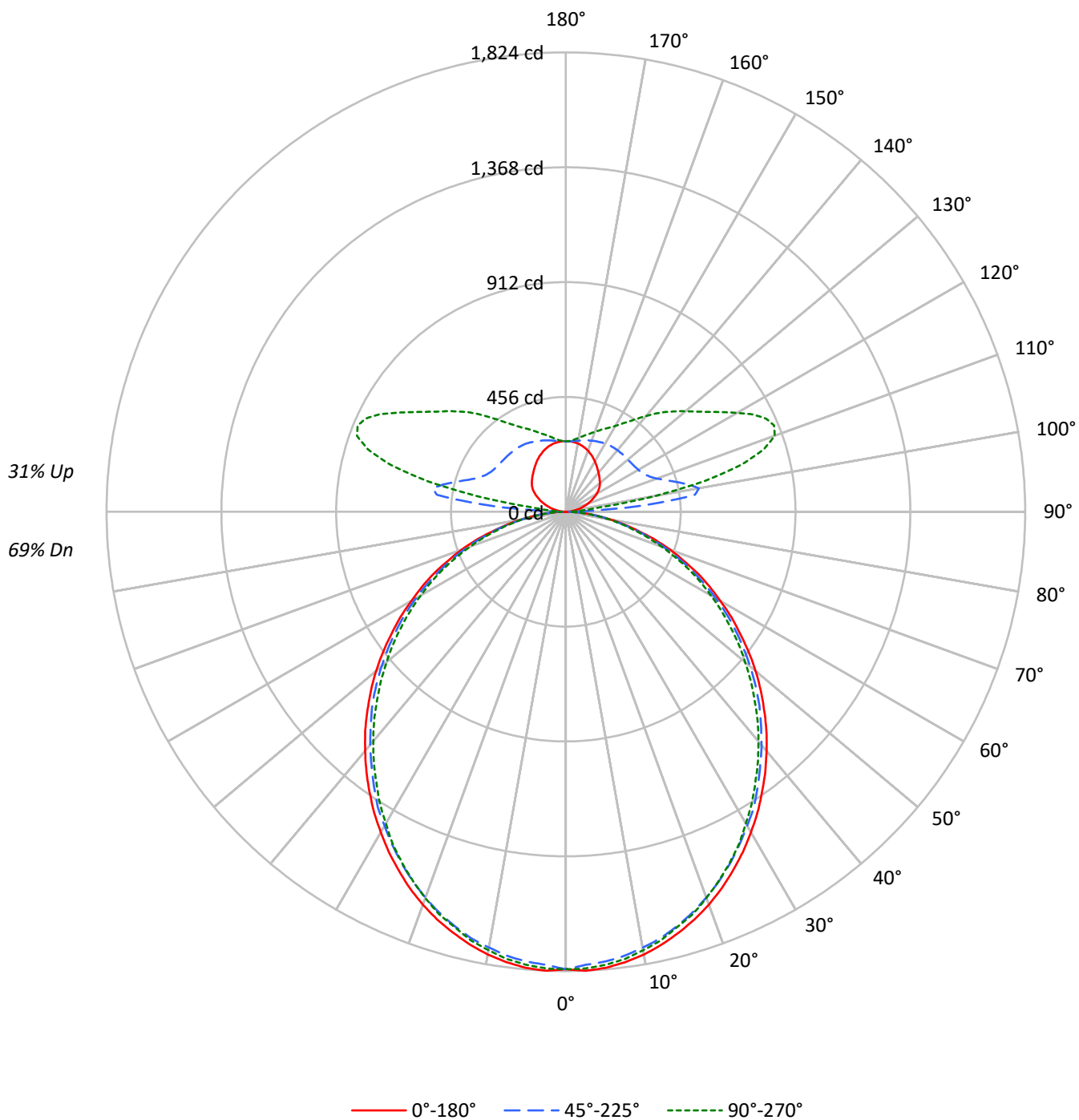
Lumens per Lamp: N/A
Luminaire Lumens: 6838.9 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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
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°	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	2.5
10°-20°	483.5	7.1
20°-30°	714.1	10.4
30°-40°	834.0	12.2
40°-50°	838.4	12.3
50°-60°	736.5	10.8
60°-70°	548.5	8.0
70°-80°	312.1	4.6
80°-90°	90.3	1.3
90°-100°	159.1	2.3
100°-110°	444.6	6.5
110°-120°	433.5	6.3
120°-130°	345.2	5.0
130°-140°	272.5	4.0
140°-150°	203.3	3.0
150°-160°	141.8	2.1
160°-170°	83.3	1.2
170°-180°	27.1	0.4
0°-30°	1368.8	20.0
0°-40°	2202.7	32.2
0°-60°	3777.6	55.2
0°-90°	4728.6	69.1
90°-120°	1037.2	15.2
90°-150°	1858.1	27.2
90°-180°	2110.0	30.9
0°-180°	6838.9	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°	1	7	14	16	16	7
95°	19	63	336	98	66	20
105°	66	97	456	797	721	70
115°	116	145	348	764	876	115
125°	162	191	325	589	691	143
135°	189	226	321	485	560	146
145°	216	247	317	398	438	135
155°	245	265	306	348	363	113
165°	268	276	294	311	317	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

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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°	1.1	6.8	14.2	15.8	16.4
92.5°	8.5	34.0	105.4	36.0	30.0
95°	19.3	62.6	336.0	98.0	65.7
97.5°	30.6	71.7	516.7	246.5	134.9
100°	41.9	79.0	536.6	515.6	355.3
102.5°	53.8	87.6	499.7	690.4	562.6
105°	65.7	97.2	455.5	796.6	720.7
107.5°	78.2	108.5	416.5	843.4	823.8
110°	91.8	120.2	384.2	844.8	882.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.3	132.4	362.6	812.8	894.7
115°	116.2	144.8	348.5	764.0	876.5
117.5°	128.1	156.6	338.8	711.9	836.9
120°	140.5	168.6	332.6	662.6	784.7
122.5°	151.3	179.8	328.6	623.8	736.0
125°	161.5	190.6	325.2	589.2	691.3
127.5°	169.4	200.8	323.5	561.0	652.7
130°	176.8	210.0	321.8	534.8	621.0
132.5°	182.4	218.2	321.3	510.5	589.8
135°	189.2	225.8	320.7	485.2	560.4
137.5°	195.5	232.0	319.6	461.4	529.2
140°	201.7	237.7	319.0	438.2	496.3
142.5°	208.5	242.8	317.9	417.0	465.7
145°	215.9	247.3	316.7	398.0	438.0
147.5°	223.2	252.2	315.0	383.4	414.2
150°	230.6	256.1	312.8	370.3	393.8
152.5°	238.0	260.4	309.9	359.0	376.8
155°	245.3	264.6	306.5	348.5	363.2
157.5°	251.0	268.3	303.7	338.2	350.2
160°	257.8	271.4	300.3	328.9	337.7
162.5°	262.9	273.6	296.9	320.1	326.4
165°	268.0	275.6	293.5	311.4	316.7
167.5°	272.0	277.4	290.1	303.7	307.1
170°	275.4	278.2	286.7	296.9	298.6
172.5°	277.6	279.0	283.9	291.0	290.7
175°	279.3	279.6	281.6	285.6	285.0
177.5°	280.5	279.9	279.9	282.2	281.0
180°	279.9	279.9	279.9	279.9	279.9

(END OF REPORT)