

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: P1011377

Luminaire Tested: S123DIP-B1165D585UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011377
REPORT IS A COMBINATION OF REPORTS P989506 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB27-4F0-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

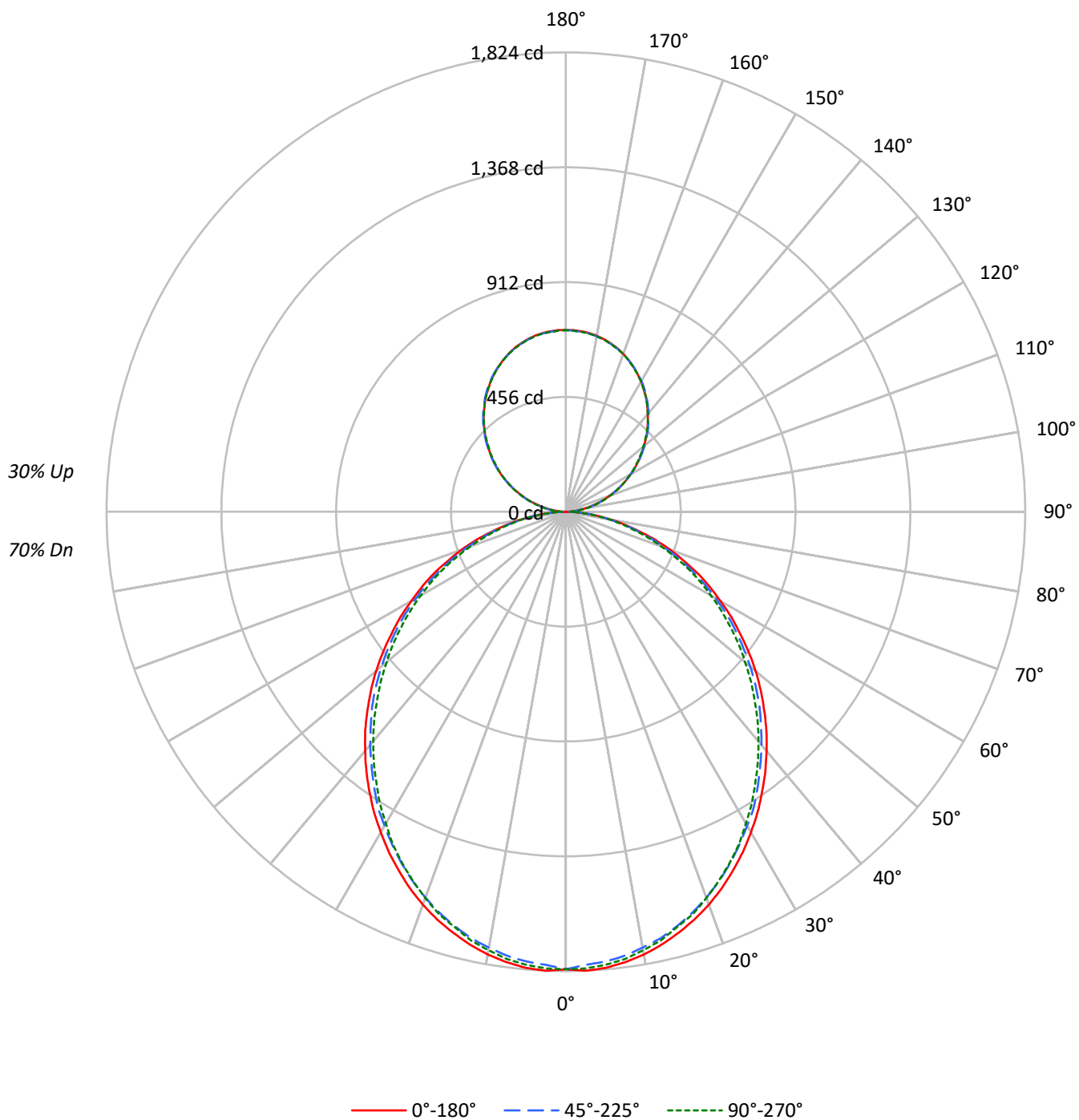
Lumens per Lamp: N/A
Luminaire Lumens: 6727.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63
2	93	85	79	74	88	81	75	70	73	68	64	65	62	59	58	55	53
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	51	48	45
4	78	67	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39
5	71	59	51	45	67	57	49	43	51	45	40	46	41	37	41	37	34
6	66	53	45	39	62	51	43	38	46	40	35	42	36	32	38	33	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	34	30	27
8	57	44	36	30	54	42	35	29	38	32	28	35	30	26	32	27	24
9	53	40	32	27	50	39	31	26	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	35	29	24	33	27	22	30	25	21	27	23	20

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	7.2
20°-30°	714.1	10.6
30°-40°	834.0	12.4
40°-50°	838.4	12.5
50°-60°	736.5	10.9
60°-70°	548.5	8.2
70°-80°	312.1	4.6
80°-90°	90.3	1.3
90°-100°	46.4	0.7
100°-110°	140.5	2.1
110°-120°	239.2	3.6
120°-130°	314.7	4.7
130°-140°	353.8	5.3
140°-150°	347.8	5.2
150°-160°	292.8	4.4
160°-170°	194.9	2.9
170°-180°	68.3	1.0
0°-30°	1368.8	20.3
0°-40°	2202.7	32.7
0°-60°	3777.6	56.2
0°-90°	4728.5	70.3
90°-120°	426.2	6.3
90°-150°	1442.5	21.4
90°-180°	1998.0	29.7
0°-180°	6727.0	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°	1	6	14	16	17	8
95°	33	37	42	44	44	37
105°	128	129	134	134	135	136
115°	241	242	241	242	241	238
125°	352	354	353	351	348	314
135°	457	461	460	458	457	352
145°	555	556	558	557	555	346
155°	635	635	636	638	634	292
165°	692	690	690	694	690	195
175°	720	717	717	721	717	68
180°	721	721	721	721	721	

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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°	0.6	6.2	13.6	15.9	17.0
92.5°	17.0	20.4	23.8	25.5	24.4
95°	33.4	37.4	41.9	44.2	44.2
97.5°	55.0	57.8	61.2	64.0	63.5
100°	77.1	80.5	83.3	85.0	86.1
102.5°	102.6	104.3	108.2	109.9	109.4
105°	127.5	128.6	133.7	133.7	134.8
107.5°	156.9	157.5	159.8	161.5	160.9
110°	184.1	185.3	186.4	188.7	187.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	213.0	213.0	215.9	215.9
115°	240.8	242.5	241.4	241.9	241.4
117.5°	269.7	270.3	269.1	269.1	267.4
120°	296.3	299.7	296.9	296.3	295.2
122.5°	324.1	326.4	325.2	323.5	321.8
125°	352.4	354.1	353.0	350.7	348.4
127.5°	378.5	381.9	380.7	377.3	375.1
130°	404.5	409.1	407.4	405.1	401.1
132.5°	430.6	435.1	434.0	431.2	428.3
135°	457.2	460.6	460.1	457.8	456.7
137.5°	481.6	484.4	486.1	483.3	481.6
140°	507.1	509.9	510.5	509.9	506.0
142.5°	530.3	533.2	534.3	533.7	530.9
145°	554.7	555.8	557.5	556.9	554.7
147.5°	575.6	577.9	579.6	579.6	576.2
150°	597.7	598.9	600.0	600.0	596.6
152.5°	615.9	617.6	618.1	619.3	616.4
155°	635.1	635.1	635.7	638.0	634.0
157.5°	651.6	651.0	651.6	653.8	650.4
160°	666.9	665.7	665.7	668.6	666.3
162.5°	680.5	678.8	679.3	682.2	678.2
165°	691.8	690.1	690.1	693.5	689.5
167.5°	701.4	699.2	699.7	703.1	699.7
170°	709.4	707.1	707.1	711.1	707.1
172.5°	715.6	713.3	713.3	716.7	712.8
175°	719.6	717.3	717.3	720.7	716.7
177.5°	721.8	719.6	719.6	723.0	719.0
180°	721.3	721.3	721.3	721.3	721.3

(END OF REPORT)