

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: P1009462

Luminaire Tested: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1009462
REPORT IS A COMBINATION OF REPORTS P984765 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B865D1080UB40-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

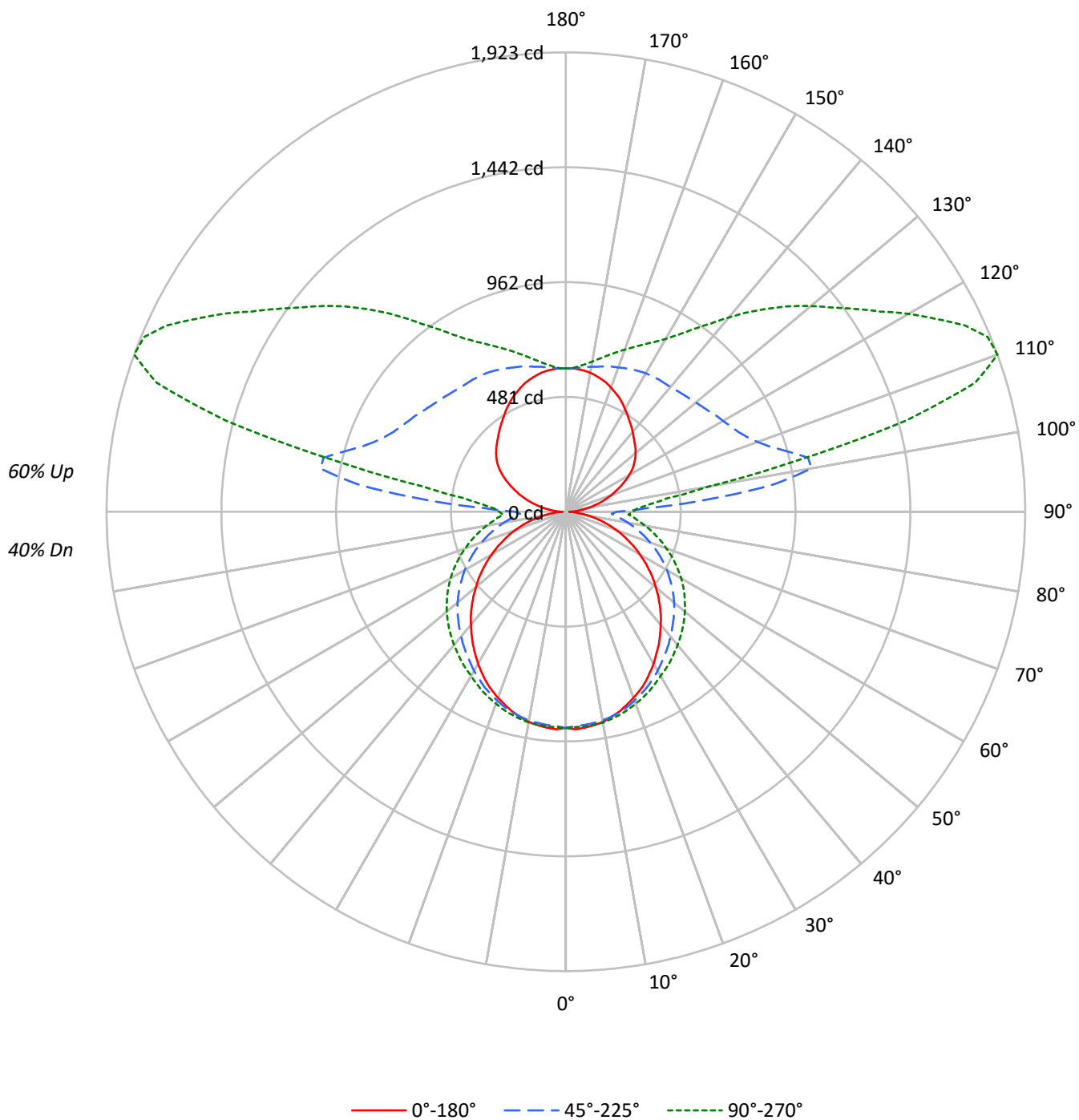
Lumens per Lamp: N/A
Luminaire Lumens: 7641.8 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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

TEST NUMBER: P1009462

CATALOG NUMBER: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1009462

CATALOG NUMBER: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40	40	40
1	94	90	85	81	86	82	78	75	66	64	61	53	51	49	40	38	37	31	31	31
2	85	78	71	65	77	71	65	60	57	53	50	45	42	40	34	32	31	25	25	25
3	78	68	60	54	70	62	55	50	50	45	41	40	36	33	30	28	25	21	21	21
4	71	60	51	45	64	54	47	42	44	39	35	35	31	28	27	24	22	18	18	18
5	65	53	45	38	59	48	41	35	39	34	30	31	27	24	24	21	19	15	15	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13	13	13
7	55	42	34	29	50	39	32	27	32	26	22	26	21	18	20	17	14	11	11	11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10	10	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	14	16	14	11	9	9	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	8	8	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14326	14326	14326
5°	14390	13714	13636
10°	14294	13239	13046
15°	14091	12747	12439
20°	13837	12231	11864
25°	13585	11737	11343
30°	13234	11236	10827
35°	12878	10751	10447
40°	12502	10333	10070
45°	12145	9953	9742
50°	11761	9603	9417
55°	11357	9232	9087
60°	10863	8845	8741
65°	10352	8400	8341
70°	9770	7922	7911
75°	9023	7444	7505
80°	7856	6946	7087
85°	6667	6480	6723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12145 cd/sqm

TEST NUMBER: P1009462

CATALOG NUMBER: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	1.1
10°-20°	246.0	3.2
20°-30°	372.8	4.9
30°-40°	454.0	5.9
40°-50°	488.4	6.4
50°-60°	474.4	6.2
60°-70°	414.3	5.4
70°-80°	318.8	4.2
80°-90°	217.4	2.8
90°-100°	390.7	5.1
100°-110°	930.2	12.2
110°-120°	935.7	12.2
120°-130°	750.6	9.8
130°-140°	588.0	7.7
140°-150°	434.4	5.7
150°-160°	303.4	4.0
160°-170°	178.7	2.3
170°-180°	58.1	0.8
0°-30°	704.6	9.2
0°-40°	1158.6	15.2
0°-60°	2121.4	27.8
0°-90°	3071.9	40.2
90°-120°	2256.6	29.5
90°-150°	4029.6	52.7
90°-180°	4570.0	59.8
0°-180°	7641.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	908	904	896	904	902	86
15°	866	868	868	880	879	244
25°	787	796	808	824	828	362
35°	678	700	725	754	763	424
45°	556	592	637	678	691	429
55°	426	474	542	589	606	381
65°	291	355	433	487	504	289
75°	161	235	319	375	392	171
85°	47	128	212	268	286	50
90°	14	105	212	263	279	12
95°	51	171	603	372	348	50
105°	147	257	968	1688	1474	157
115°	253	333	794	1595	1844	251
125°	349	412	733	1276	1480	311
135°	408	486	694	1047	1203	315
145°	464	533	676	848	933	291
155°	528	570	657	743	772	243
165°	575	592	629	667	678	162
175°	599	600	605	612	611	57
180°	600	600	600	600	600	

TEST NUMBER: P1009462

CATALOG NUMBER: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	905.0	905.0	905.0	905.0	905.0
2.5°	911.5	907.6	898.4	905.0	902.3
5°	907.6	903.6	895.8	903.6	902.3
7.5°	901.0	898.4	891.8	901.0	899.7
10°	893.2	890.5	886.6	897.1	895.8
12.5°	880.0	881.3	878.7	889.2	887.9
15°	865.6	868.2	868.2	880.0	878.7
17.5°	847.2	852.5	856.4	868.2	868.2
20°	828.9	835.4	840.7	855.1	855.1
22.5°	809.2	817.1	825.0	839.4	842.0
25°	786.9	796.1	807.9	823.6	827.6
27.5°	760.7	775.1	788.2	807.9	810.5
30°	734.5	751.5	768.6	789.5	793.5
32.5°	705.6	725.3	746.3	771.2	779.1
35°	678.1	700.4	725.3	754.1	763.3
37.5°	647.9	672.8	704.3	735.8	745.0
40°	617.7	646.6	682.0	716.1	727.9
42.5°	588.9	617.7	659.7	697.7	709.5
45°	556.1	591.5	637.4	678.1	691.2
47.5°	524.6	562.6	615.1	657.1	671.5
50°	491.8	532.5	591.5	636.1	650.5
52.5°	460.3	503.6	566.6	612.5	628.2
55°	426.2	473.5	541.7	588.9	605.9
57.5°	393.5	445.9	514.1	565.3	582.3
60°	358.0	414.4	489.2	539.0	557.4
62.5°	326.6	385.6	460.3	514.1	531.2
65°	291.2	355.4	432.8	486.6	503.6
67.5°	259.7	326.6	405.3	459.0	477.4
70°	225.6	293.8	375.1	431.5	447.2
72.5°	194.1	264.9	347.6	402.6	422.3
75°	161.3	234.8	318.7	375.1	392.1
77.5°	129.8	205.9	291.2	347.6	365.9
80°	98.4	178.4	263.6	318.7	337.1
82.5°	72.1	150.8	237.4	292.5	309.5
85°	47.2	128.5	212.5	267.6	285.9
87.5°	28.9	107.5	191.5	245.3	262.3
90°	14.3	104.8	212.3	263.1	279.4
92.5°	29.1	136.2	339.1	294.4	298.6
95°	50.9	171.4	603.3	371.5	348.0
97.5°	69.2	196.6	879.2	533.0	426.4
100°	98.1	218.2	1043.1	862.4	607.3
102.5°	123.3	238.1	1039.7	1323.6	989.3
105°	147.4	257.0	968.2	1687.6	1474.0
107.5°	175.1	275.8	901.2	1812.7	1797.1
110°	201.4	295.2	854.1	1780.3	1922.8

TEST NUMBER: P1009462

CATALOG NUMBER: S122DIP-B865D1080UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	226.8	314.8	819.6	1696.6	1911.4
115°	253.4	333.1	794.4	1595.0	1844.4
117.5°	279.8	352.6	775.9	1498.7	1748.4
120°	305.2	371.7	760.0	1410.3	1657.3
122.5°	329.4	392.4	747.5	1340.5	1560.1
125°	348.9	412.4	732.6	1276.4	1480.5
127.5°	366.2	432.4	721.2	1219.2	1404.2
130°	381.2	451.4	711.1	1162.7	1339.4
132.5°	395.1	470.0	702.1	1104.4	1273.6
135°	407.6	486.2	694.3	1047.4	1203.4
137.5°	420.3	500.0	687.8	989.8	1134.0
140°	435.3	511.4	681.3	937.8	1062.3
142.5°	450.3	521.8	678.7	888.9	991.9
145°	464.0	533.3	676.4	847.6	933.2
147.5°	480.2	542.6	673.0	811.6	879.0
150°	496.4	551.8	669.5	785.0	834.6
152.5°	512.5	561.0	663.7	763.6	801.1
155°	527.5	569.6	656.8	742.8	772.2
157.5°	540.2	576.6	649.9	723.2	746.8
160°	552.9	583.6	643.0	703.6	722.6
162.5°	565.6	588.7	637.2	685.1	699.5
165°	574.9	592.2	629.1	667.2	677.6
167.5°	582.9	595.6	622.2	651.0	656.8
170°	591.0	597.4	616.4	636.0	638.3
172.5°	595.6	599.0	609.5	622.8	623.3
175°	599.1	599.7	604.9	612.3	610.6
177.5°	601.4	600.2	600.2	604.9	601.4
180°	600.2	600.2	600.2	600.2	600.2

(END OF REPORT)