

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: P1011402

Luminaire Tested: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011402
REPORT IS A COMBINATION OF REPORTS P989546 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D585UB40-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

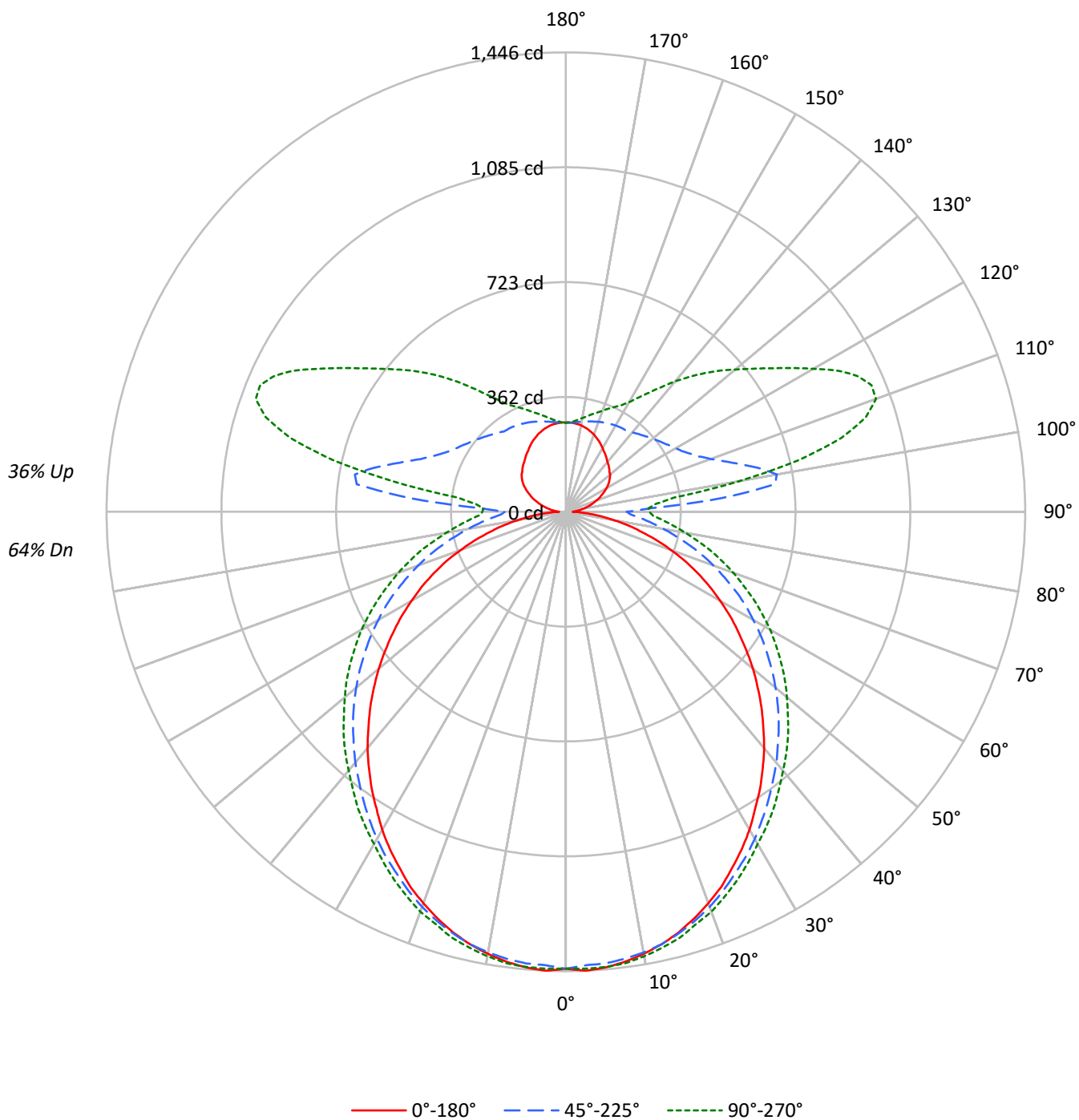
Lumens per Lamp: N/A
Luminaire Lumens: 6950.9 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1011402

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P1011402

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	100	95	90	86	93	89	85	81	78	75	72	68	66	63	59	57	55
2	90	82	75	69	84	77	71	66	67	63	59	59	55	52	51	48	46
3	82	72	63	57	76	67	60	54	59	53	49	52	47	43	45	41	38
4	75	63	55	48	70	59	52	46	52	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	40	35	41	36	32	36	32	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	55	43	35	30	38	32	27	34	28	24	29	25	22
8	54	41	33	27	51	39	32	26	35	28	24	31	26	22	27	23	20
9	51	38	30	24	47	36	28	23	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15480	15480	15480
5°	15521	15025	15013
10°	15376	14618	14506
15°	15173	14168	13969
20°	14884	13668	13393
25°	14528	13103	12795
30°	14165	12593	12195
35°	13756	12058	11706
40°	13366	11567	11190
45°	12935	11093	10764
50°	12508	10623	10303
55°	12035	10141	9878
60°	11572	9647	9442
65°	11096	9122	8934
70°	10381	8533	8408
75°	9476	7861	7866
80°	8420	7181	7248
85°	7377	6630	6805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12935 cd/sqm

TEST NUMBER: P1011402

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.4	2.0
10°-20°	388.9	5.6
20°-30°	581.6	8.4
30°-40°	694.4	10.0
40°-50°	726.5	10.5
50°-60°	681.7	9.8
60°-70°	569.4	8.2
70°-80°	407.2	5.9
80°-90°	243.8	3.5
90°-100°	311.8	4.5
100°-110°	557.8	8.0
110°-120°	509.5	7.3
120°-130°	388.8	5.6
130°-140°	292.4	4.2
140°-150°	207.9	3.0
150°-160°	142.2	2.0
160°-170°	83.5	1.2
170°-180°	27.2	0.4
0°-30°	1106.9	15.9
0°-40°	1801.2	25.9
0°-60°	3209.4	46.2
0°-90°	4429.9	63.7
90°-120°	1379.0	19.8
90°-150°	2268.0	32.6
90°-180°	2521.0	36.3
0°-180°	6950.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1440	1436	1427	1440	1438	137
15°	1371	1375	1374	1390	1388	386
25°	1238	1253	1258	1278	1278	570
35°	1065	1090	1111	1134	1140	666
45°	871	909	948	978	990	672
55°	664	716	772	815	827	595
65°	459	520	589	636	652	454
75°	249	323	401	453	472	266
85°	77	155	238	291	307	79
90°	22	104	191	246	262	16
95°	36	141	492	302	285	34
105°	78	148	574	960	898	83
115°	124	172	432	887	1012	124
125°	167	196	376	674	787	149
135°	193	228	340	534	617	149
145°	218	248	318	412	458	136
155°	246	265	307	349	364	113
165°	269	276	294	312	318	76
175°	280	280	282	286	286	27
180°	281	281	281	281	281	

TEST NUMBER: P1011402

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.1	1438.1	1438.1	1438.1	1438.1
2.5°	1445.9	1441.2	1428.7	1441.2	1439.6
5°	1439.6	1436.5	1427.1	1439.6	1438.1
7.5°	1428.7	1428.7	1419.3	1434.9	1433.4
10°	1413.0	1416.1	1408.3	1424.0	1420.8
12.5°	1394.2	1398.9	1394.2	1408.3	1405.2
15°	1370.7	1375.4	1373.8	1389.5	1387.9
17.5°	1342.5	1351.9	1350.3	1364.4	1361.3
20°	1311.2	1320.6	1323.7	1337.8	1339.4
22.5°	1278.3	1287.7	1292.4	1311.2	1309.6
25°	1237.5	1253.2	1257.9	1278.3	1278.3
27.5°	1198.4	1215.6	1225.0	1242.2	1243.8
30°	1156.1	1176.5	1189.0	1207.8	1207.8
32.5°	1109.1	1132.6	1149.8	1170.2	1174.9
35°	1065.2	1090.3	1110.7	1134.2	1140.4
37.5°	1018.2	1046.4	1069.9	1096.6	1101.3
40°	971.2	999.4	1030.8	1057.4	1063.7
42.5°	919.5	955.6	988.5	1018.2	1027.6
45°	871.0	908.6	947.7	977.5	990.0
47.5°	819.3	861.6	905.4	938.3	947.7
50°	769.2	813.0	861.6	897.6	908.6
52.5°	715.9	762.9	817.7	855.3	869.4
55°	664.2	715.9	772.3	814.6	827.1
57.5°	614.1	667.3	728.4	770.7	784.8
60°	560.8	617.2	681.4	725.3	742.5
62.5°	510.7	568.6	637.6	681.4	697.1
65°	459.0	520.1	589.0	636.0	651.7
67.5°	407.3	471.5	540.4	592.1	604.7
70°	352.5	419.8	495.0	545.1	560.8
72.5°	302.3	369.7	448.0	499.7	515.4
75°	249.1	322.7	401.0	452.7	471.5
77.5°	203.6	277.3	355.6	410.4	424.5
80°	155.1	231.8	313.3	366.6	382.2
82.5°	112.8	191.1	274.1	327.4	343.1
85°	76.8	155.1	238.1	291.4	307.0
87.5°	47.0	125.3	205.2	258.5	274.1
90°	21.5	104.0	191.2	246.2	262.4
92.5°	27.3	120.3	270.2	252.3	260.4
95°	36.5	141.1	492.1	301.9	285.2
97.5°	46.4	144.0	663.9	439.9	343.5
100°	56.1	143.4	674.4	698.8	553.7
102.5°	66.5	144.2	628.1	863.0	750.6
105°	78.4	147.5	574.3	960.3	898.2
107.5°	89.4	152.8	525.7	996.2	990.7
110°	101.5	158.0	485.6	988.2	1038.8

TEST NUMBER: P1011402

CATALOG NUMBER: S123DIP-B1165D585UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.0	164.0	454.6	945.1	1041.3
115°	124.3	171.8	432.5	886.8	1012.2
117.5°	136.2	177.5	413.4	825.2	963.1
120°	147.2	183.1	399.3	766.3	899.8
122.5°	158.0	189.8	387.6	718.0	841.5
125°	166.6	195.9	376.3	674.0	787.2
127.5°	174.6	204.5	366.8	636.2	739.2
130°	182.0	213.6	357.2	600.6	696.4
132.5°	186.1	221.9	348.8	566.8	657.3
135°	192.9	228.0	340.4	533.7	616.8
137.5°	199.1	234.3	333.0	500.4	576.1
140°	203.9	240.0	326.2	469.3	535.4
142.5°	210.7	243.4	318.8	438.6	495.3
145°	218.1	248.0	317.6	411.6	458.0
147.5°	223.9	252.8	315.9	389.1	426.4
150°	231.3	256.8	313.7	371.3	398.0
152.5°	238.7	261.1	310.8	360.0	377.9
155°	246.0	265.4	307.4	349.4	364.2
157.5°	251.7	269.0	304.6	339.2	351.2
160°	258.5	272.2	301.2	329.8	338.7
162.5°	263.7	274.4	297.7	321.0	327.3
165°	268.8	276.4	294.3	312.2	317.6
167.5°	272.7	278.2	290.9	304.5	308.0
170°	276.2	279.0	287.5	297.8	299.5
172.5°	278.4	279.8	284.7	291.8	291.5
175°	280.1	280.4	282.4	286.4	285.8
177.5°	281.3	280.7	280.7	283.0	281.8
180°	280.7	280.7	280.7	280.7	280.7

(END OF REPORT)