

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: P1010504

Luminaire Tested: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010504
REPORT IS A COMBINATION OF REPORTS P989453 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

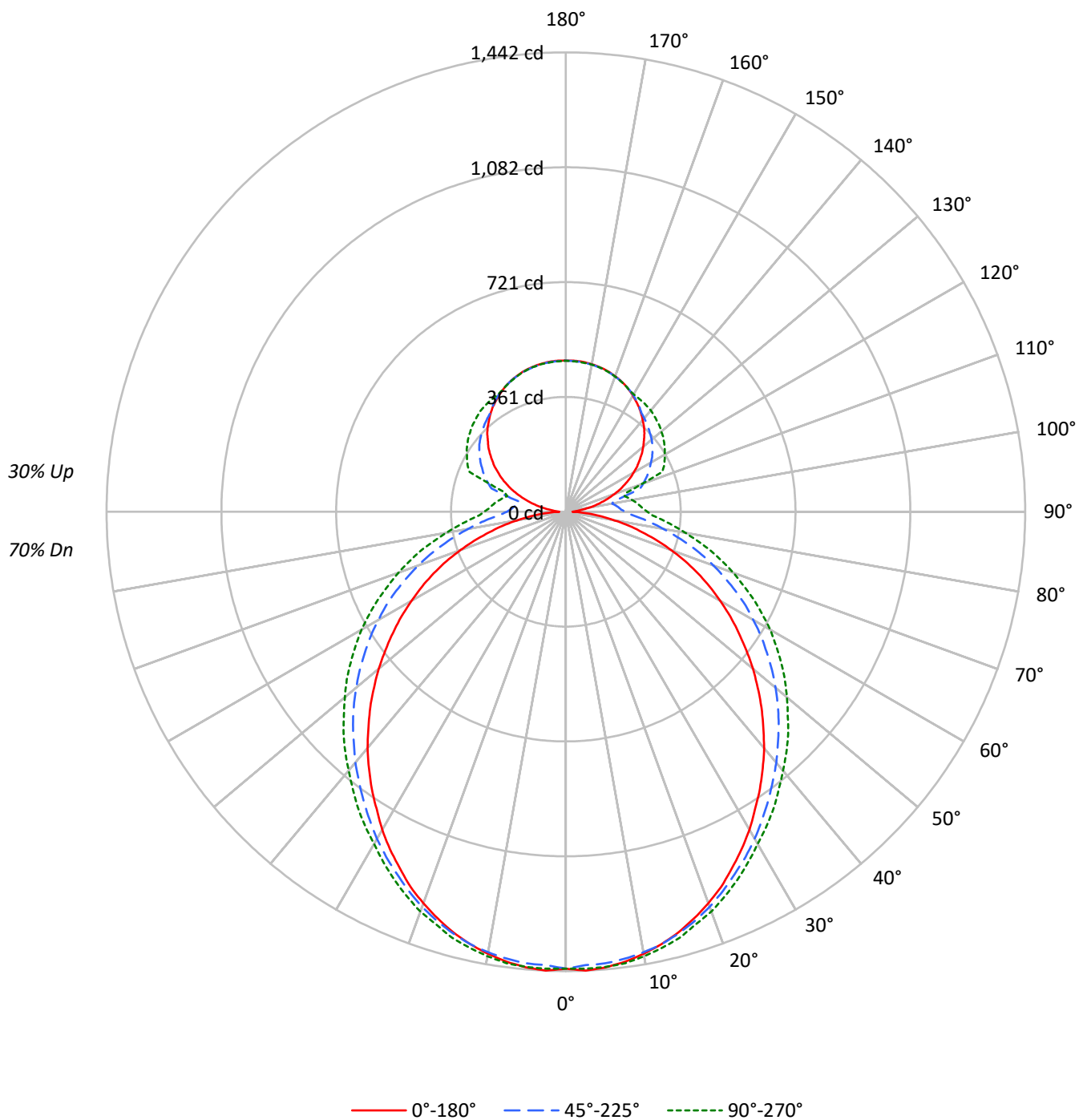
Lumens per Lamp: N/A
Luminaire Lumens: 6266.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
Input Voltage (V): 120
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: P1010504

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

Luminous Intensity Polar Plot



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CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	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	75	75	75
1	101	96	91	87	95	91	87	83	81	78	75	72	70	67	64	62	60	60	60	56
2	91	83	76	70	86	78	72	67	70	65	61	62	59	55	55	52	50	50	50	46
3	83	72	64	58	78	69	61	55	61	55	51	55	50	46	49	45	42	42	42	38
4	76	64	55	49	71	61	53	47	54	48	43	49	43	39	43	39	36	36	36	32
5	70	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	31	31	28
6	64	51	42	36	60	48	40	35	44	37	32	39	34	29	35	31	27	27	27	24
7	59	46	38	32	56	44	36	30	40	33	28	36	30	26	32	27	24	24	24	21
8	55	42	34	28	52	40	32	27	36	30	25	33	27	23	29	25	21	21	21	19
9	51	38	30	25	48	37	29	24	33	27	22	30	25	21	27	23	19	19	19	17
10	48	35	28	22	45	34	27	22	31	25	20	28	23	19	25	21	17	17	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15434	15434	15434
5°	15477	14982	14969
10°	15332	14576	14464
15°	15129	14128	13929
20°	14841	13628	13354
25°	14487	13066	12758
30°	14123	12556	12160
35°	13716	12022	11673
40°	13328	11534	11158
45°	12898	11061	10734
50°	12471	10593	10273
55°	12000	10112	9850
60°	11539	9621	9416
65°	11064	9096	8908
70°	10348	8509	8384
75°	9449	7839	7845
80°	8393	7161	7228
85°	7348	6611	6785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12898 cd/sqm

TEST NUMBER: P1010504

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	2.2
10°-20°	387.8	6.2
20°-30°	579.9	9.3
30°-40°	692.3	11.0
40°-50°	724.4	11.6
50°-60°	679.8	10.8
60°-70°	567.8	9.1
70°-80°	406.0	6.5
80°-90°	242.5	3.9
90°-100°	168.5	2.7
100°-110°	192.5	3.1
110°-120°	272.7	4.4
120°-130°	294.1	4.7
130°-140°	287.8	4.6
140°-150°	255.3	4.1
150°-160°	202.7	3.2
160°-170°	130.8	2.1
170°-180°	45.1	0.7
0°-30°	1103.7	17.6
0°-40°	1796.0	28.7
0°-60°	3200.1	51.1
0°-90°	4416.5	70.5
90°-120°	633.7	10.1
90°-150°	1470.9	23.5
90°-180°	1850.0	29.5
0°-180°	6266.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1436	1432	1423	1436	1434	136
15°	1367	1371	1370	1386	1384	385
25°	1234	1250	1254	1275	1275	569
35°	1062	1087	1107	1131	1137	664
45°	868	906	945	975	987	670
55°	662	714	770	812	825	593
65°	458	519	587	634	650	452
75°	248	322	400	451	470	265
85°	76	155	237	290	306	79
90°	21	101	185	240	256	16
95°	39	85	166	216	232	39
105°	118	159	194	176	190	124
115°	205	226	285	326	340	203
125°	282	285	332	365	377	253
135°	349	349	368	397	404	269
145°	400	401	402	415	422	250
155°	439	439	439	441	439	202
165°	463	462	462	465	462	131
175°	474	473	473	475	473	45
180°	474	474	474	474	474	

TEST NUMBER: P1010504

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.9	1433.9	1433.9	1433.9	1433.9
2.5°	1441.7	1437.0	1424.5	1437.0	1435.5
5°	1435.5	1432.3	1423.0	1435.5	1433.9
7.5°	1424.5	1424.5	1415.1	1430.8	1429.2
10°	1408.9	1412.0	1404.2	1419.8	1416.7
12.5°	1390.2	1394.8	1390.2	1404.2	1401.1
15°	1366.7	1371.4	1369.9	1385.5	1383.9
17.5°	1338.6	1348.0	1346.4	1360.5	1357.4
20°	1307.4	1316.7	1319.9	1333.9	1335.5
22.5°	1274.6	1283.9	1288.6	1307.4	1305.8
25°	1234.0	1249.6	1254.3	1274.6	1274.6
27.5°	1194.9	1212.1	1221.5	1238.6	1240.2
30°	1152.7	1173.0	1185.5	1204.3	1204.3
32.5°	1105.9	1129.3	1146.5	1166.8	1171.5
35°	1062.1	1087.1	1107.4	1130.9	1137.1
37.5°	1015.3	1043.4	1066.8	1093.4	1098.1
40°	968.4	996.5	1027.8	1054.3	1060.6
42.5°	916.9	952.8	985.6	1015.3	1024.7
45°	868.5	905.9	945.0	974.7	987.2
47.5°	816.9	859.1	902.8	935.6	945.0
50°	766.9	810.7	859.1	895.0	905.9
52.5°	713.8	760.7	815.4	852.8	866.9
55°	662.3	713.8	770.1	812.2	824.7
57.5°	612.3	665.4	726.3	768.5	782.5
60°	559.2	615.4	679.5	723.2	740.4
62.5°	509.2	567.0	635.7	679.5	695.1
65°	457.7	518.6	587.3	634.2	649.8
67.5°	406.1	470.2	538.9	590.4	602.9
70°	351.4	418.6	493.6	543.6	559.2
72.5°	301.5	368.6	446.7	498.3	513.9
75°	248.4	321.8	399.9	451.4	470.2
77.5°	203.1	276.5	354.6	409.2	423.3
80°	154.6	231.2	312.4	365.5	381.1
82.5°	112.5	190.6	273.3	326.5	342.1
85°	76.5	154.6	237.4	290.5	306.1
87.5°	46.9	125.0	204.6	257.7	273.3
90°	20.7	100.7	185.0	239.5	255.8
92.5°	26.8	91.9	173.2	227.2	241.6
95°	38.7	85.1	165.5	216.5	232.1
97.5°	54.7	101.1	156.6	206.2	222.1
100°	73.7	130.6	147.5	195.6	211.6
102.5°	95.3	143.6	152.6	184.7	201.1
105°	117.5	158.9	194.3	175.7	190.4
107.5°	139.5	175.5	244.9	232.7	200.7
110°	161.6	192.6	258.9	287.9	250.0



TEST NUMBER: P1010504

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	184.2	208.5	271.7	313.9	327.3
115°	204.8	225.7	285.1	326.1	340.0
117.5°	226.6	241.6	296.5	336.8	349.6
120°	245.1	256.2	308.8	347.5	358.5
122.5°	265.6	271.2	321.0	357.2	368.5
125°	282.4	285.2	331.9	365.4	377.0
127.5°	300.7	301.9	342.8	375.1	385.3
130°	317.6	318.9	351.6	382.6	391.3
132.5°	332.2	335.1	359.6	389.1	399.0
135°	348.8	349.4	367.9	397.2	403.9
137.5°	362.9	364.2	375.8	402.6	409.7
140°	375.5	377.6	383.3	408.2	415.3
142.5°	388.5	389.1	390.1	411.5	418.2
145°	400.5	401.4	402.1	415.3	421.5
147.5°	410.6	412.3	413.0	418.4	422.9
150°	421.1	422.2	422.9	423.6	425.6
152.5°	430.6	431.0	431.3	432.8	431.0
155°	439.4	438.7	439.1	440.9	438.7
157.5°	446.5	446.5	446.1	448.3	445.4
160°	452.8	452.5	452.1	454.2	451.8
162.5°	458.8	457.8	457.4	459.9	457.8
165°	463.4	462.4	462.0	464.8	462.4
167.5°	467.3	465.9	465.9	468.7	465.9
170°	470.5	469.0	469.0	471.9	469.0
172.5°	472.6	470.8	471.2	474.0	470.8
175°	474.3	472.6	472.9	475.4	472.6
177.5°	475.0	473.3	473.6	476.5	472.9
180°	474.3	474.3	474.3	474.3	474.3

(END OF REPORT)