

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: P1010506

Luminaire Tested: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1010506
REPORT IS A COMBINATION OF REPORTS P989455 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K
Description: Define 3 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

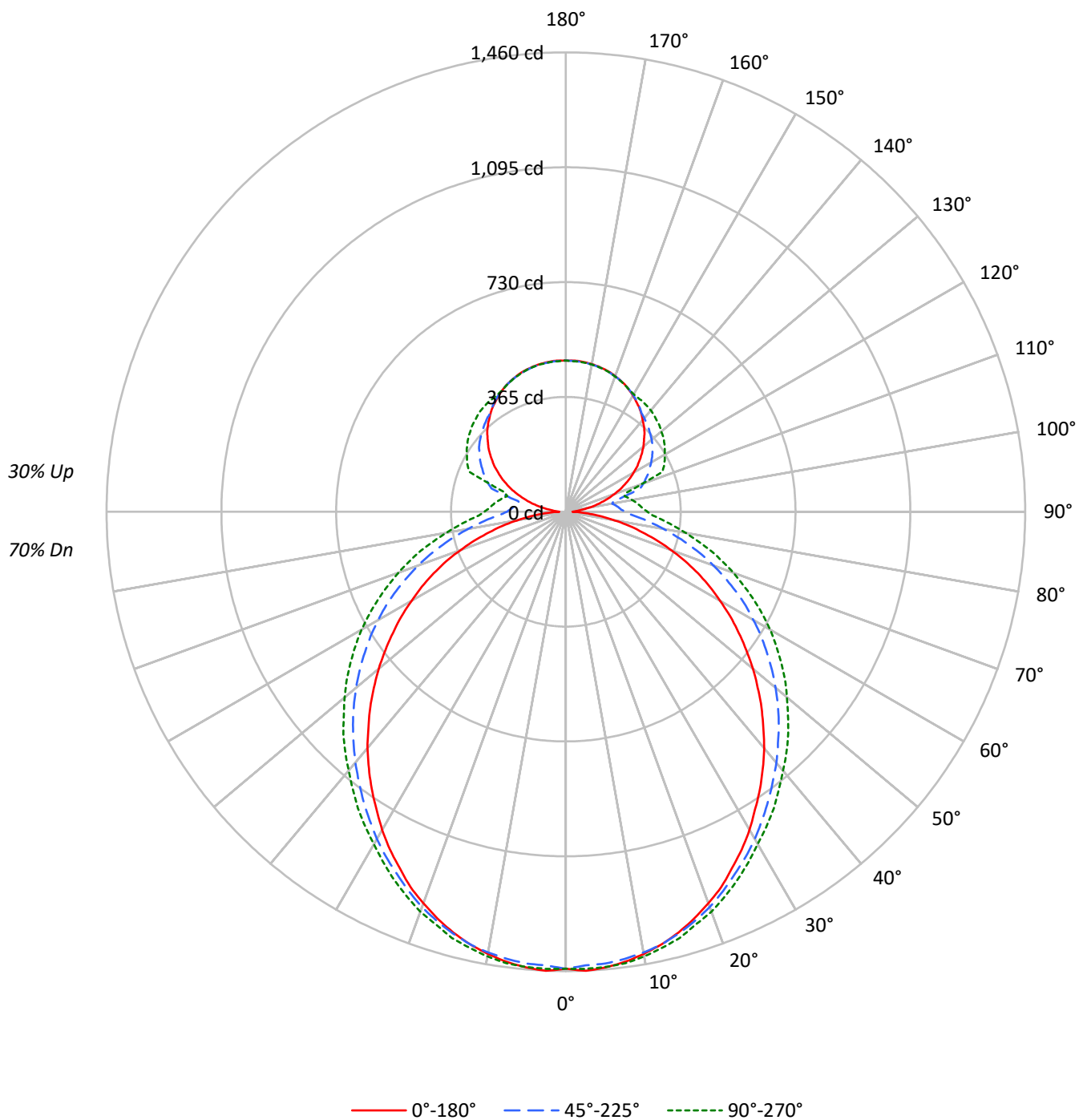
Lumens per Lamp: N/A
Luminaire Lumens: 6347.0 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
Input Voltage (V):
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: P1010506

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1010506

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

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°	15632	15632	15632
5°	15675	15174	15162
10°	15529	14763	14650
15°	15323	14310	14108
20°	15032	13803	13526
25°	14672	13234	12922
30°	14306	12718	12317
35°	13893	12177	11822
40°	13500	11682	11301
45°	13063	11204	10872
50°	12632	10728	10406
55°	12154	10242	9976
60°	11687	9744	9537
65°	11204	9214	9022
70°	10484	8617	8492
75°	9567	7939	7945
80°	8502	7252	7320
85°	7444	6697	6873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13063 cd/sqm

TEST NUMBER: P1010506

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	2.2
10°-20°	392.8	6.2
20°-30°	587.3	9.3
30°-40°	701.2	11.0
40°-50°	733.7	11.6
50°-60°	688.5	10.8
60°-70°	575.1	9.1
70°-80°	411.2	6.5
80°-90°	245.7	3.9
90°-100°	170.7	2.7
100°-110°	195.0	3.1
110°-120°	276.2	4.4
120°-130°	297.9	4.7
130°-140°	291.6	4.6
140°-150°	258.7	4.1
150°-160°	205.4	3.2
160°-170°	132.5	2.1
170°-180°	45.7	0.7
0°-30°	1117.9	17.6
0°-40°	1819.1	28.7
0°-60°	3241.3	51.1
0°-90°	4473.3	70.5
90°-120°	641.9	10.1
90°-150°	1490.1	23.5
90°-180°	1874.0	29.5
0°-180°	6347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1454	1451	1441	1454	1452	138
15°	1384	1389	1388	1403	1402	390
25°	1250	1266	1270	1291	1291	576
35°	1076	1101	1122	1145	1152	673
45°	880	918	957	987	1000	678
55°	671	723	780	823	835	601
65°	464	525	595	642	658	458
75°	252	326	405	457	476	269
85°	78	157	240	294	310	80
90°	21	102	187	243	259	16
95°	39	86	168	219	235	40
105°	119	161	197	178	193	126
115°	208	229	289	330	344	205
125°	286	289	336	370	382	256
135°	353	354	373	402	409	272
145°	406	407	407	421	427	254
155°	445	444	445	447	444	205
165°	470	468	468	471	468	133
175°	481	479	479	482	479	46
180°	481	481	481	481	481	

TEST NUMBER: P1010506

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1452.3	1452.3	1452.3	1452.3	1452.3
2.5°	1460.3	1455.5	1442.8	1455.5	1453.9
5°	1453.9	1450.8	1441.3	1453.9	1452.3
7.5°	1442.8	1442.8	1433.4	1449.2	1447.6
10°	1427.0	1430.2	1422.3	1438.1	1434.9
12.5°	1408.0	1412.8	1408.0	1422.3	1419.1
15°	1384.3	1389.1	1387.5	1403.3	1401.7
17.5°	1355.8	1365.3	1363.7	1378.0	1374.8
20°	1324.2	1333.7	1336.8	1351.1	1352.7
22.5°	1291.0	1300.5	1305.2	1324.2	1322.6
25°	1249.8	1265.7	1270.4	1291.0	1291.0
27.5°	1210.3	1227.7	1237.2	1254.6	1256.2
30°	1167.6	1188.1	1200.8	1219.8	1219.8
32.5°	1120.1	1143.8	1161.2	1181.8	1186.6
35°	1075.8	1101.1	1121.7	1145.4	1151.7
37.5°	1028.3	1056.8	1080.6	1107.4	1112.2
40°	980.9	1009.4	1041.0	1067.9	1074.2
42.5°	928.7	965.1	998.3	1028.3	1037.8
45°	879.6	917.6	957.2	987.2	999.9
47.5°	827.4	870.1	914.4	947.7	957.2
50°	776.8	821.1	870.1	906.5	917.6
52.5°	723.0	770.5	825.8	863.8	878.0
55°	670.8	723.0	780.0	822.7	835.3
57.5°	620.2	674.0	735.7	778.4	792.6
60°	566.4	623.3	688.2	732.5	749.9
62.5°	515.8	574.3	643.9	688.2	704.0
65°	463.5	525.2	594.9	642.3	658.1
67.5°	411.3	476.2	545.8	598.0	610.7
70°	356.0	424.0	499.9	550.6	566.4
72.5°	305.3	373.4	452.5	504.7	520.5
75°	251.5	325.9	405.0	457.2	476.2
77.5°	205.7	280.0	359.1	414.5	428.7
80°	156.6	234.1	316.4	370.2	386.0
82.5°	113.9	193.0	276.9	330.7	346.5
85°	77.5	156.6	240.5	294.3	310.1
87.5°	47.5	126.6	207.3	261.0	276.9
90°	21.0	102.0	187.4	242.6	259.1
92.5°	27.2	93.1	175.4	230.1	244.7
95°	39.2	86.2	167.7	219.3	235.1
97.5°	55.4	102.4	158.5	208.9	225.0
100°	74.5	132.4	149.4	198.1	214.3
102.5°	96.6	145.5	154.5	187.0	203.7
105°	119.1	160.9	196.9	178.0	192.9
107.5°	141.4	177.8	248.1	235.8	203.2
110°	163.7	195.1	262.3	291.6	253.2



TEST NUMBER: P1010506

CATALOG NUMBER: S123DIP-B1165D365UB2750-4F0-XX-W2A-D_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	186.6	211.2	275.3	318.0	331.6
115°	207.5	228.6	288.7	330.3	344.4
117.5°	229.6	244.8	300.4	341.2	354.2
120°	248.4	259.5	312.8	352.0	363.1
122.5°	269.1	274.8	325.2	361.8	373.2
125°	286.0	288.9	336.2	370.1	382.0
127.5°	304.6	306.0	347.2	380.0	390.3
130°	321.7	323.1	356.1	387.7	396.4
132.5°	336.7	339.5	364.3	394.2	404.2
135°	353.4	354.0	372.8	402.4	409.2
137.5°	367.7	369.0	380.8	407.9	415.1
140°	380.4	382.6	388.3	413.6	420.7
142.5°	393.6	394.2	395.2	416.9	423.7
145°	405.8	406.7	407.4	420.8	427.1
147.5°	415.9	417.7	418.4	423.9	428.5
150°	426.7	427.7	428.4	429.2	431.3
152.5°	436.3	436.6	437.0	438.4	436.6
155°	445.2	444.5	444.9	446.6	444.5
157.5°	452.4	452.4	452.0	454.1	451.3
160°	458.8	458.4	458.1	460.2	457.7
162.5°	464.9	463.8	463.4	465.9	463.8
165°	469.5	468.4	468.1	470.9	468.4
167.5°	473.4	472.0	472.0	474.9	472.0
170°	476.6	475.2	475.2	478.1	475.2
172.5°	478.8	477.0	477.4	480.2	477.0
175°	480.6	478.8	479.1	481.6	478.8
177.5°	481.3	479.5	479.8	482.7	479.1
180°	480.6	480.6	480.6	480.6	480.6

(END OF REPORT)