

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: P1011332

Luminaire Tested: S123DIP-B1165D365UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011332
REPORT IS A COMBINATION OF REPORTS P989443 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D365UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

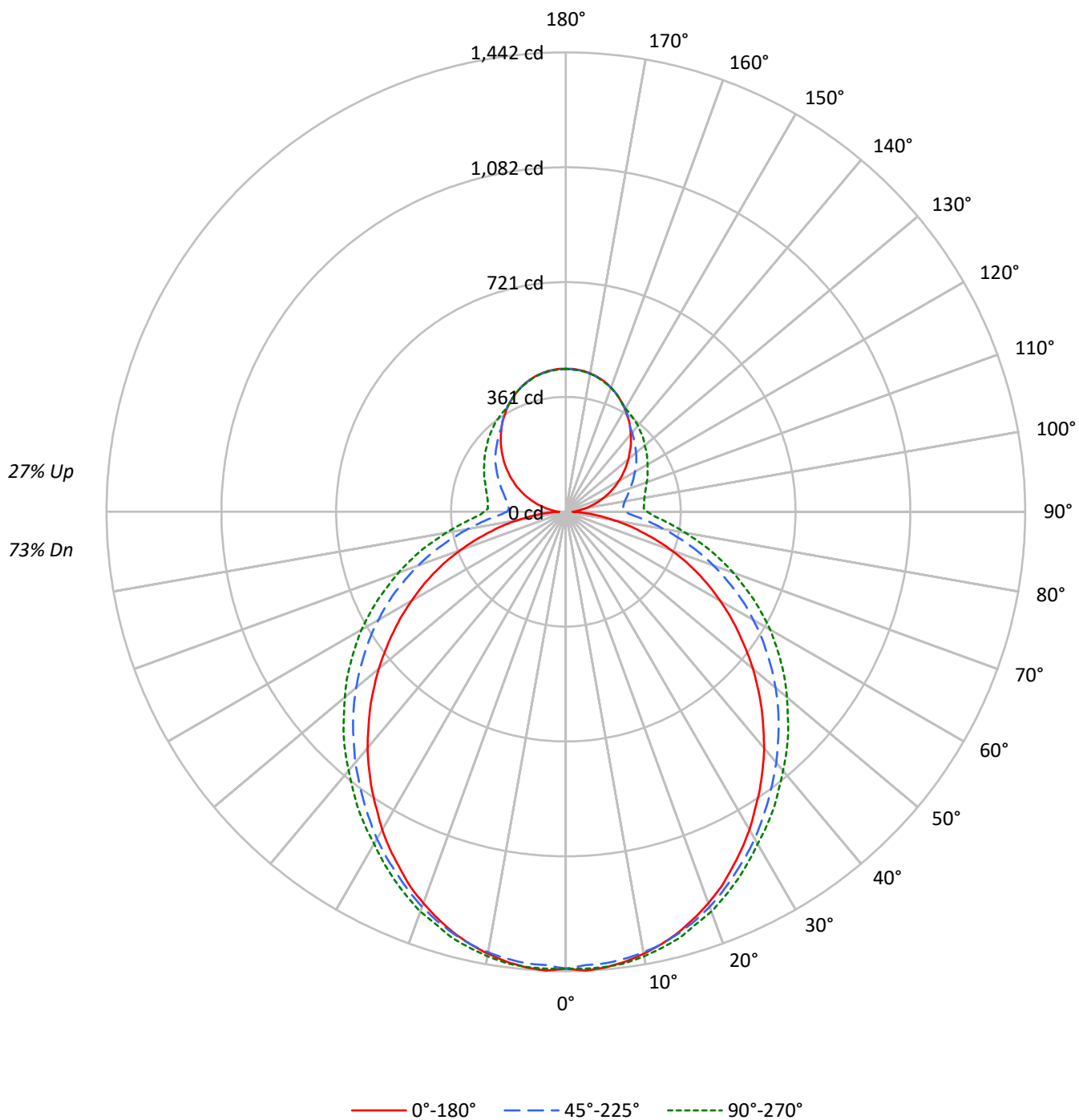
Lumens per Lamp: N/A
Luminaire Lumens: 6063.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	101	96	92	87	96	91	87	83	82	79	76	74	71	69	66	64	62
2	92	83	76	70	87	79	73	67	71	66	62	64	60	56	57	54	51
3	83	73	64	58	79	69	62	56	62	56	51	56	51	47	50	46	43
4	76	64	55	49	72	61	53	47	55	49	43	50	44	40	44	40	37
5	70	57	48	42	66	54	46	40	49	42	37	44	39	34	40	35	32
6	64	51	42	36	61	49	41	35	44	38	32	40	34	30	36	31	28
7	60	46	38	32	56	44	36	31	40	33	29	36	31	27	33	28	25
8	55	42	34	28	52	40	33	27	37	30	25	33	28	24	30	26	22
9	52	38	30	25	49	37	29	24	34	27	23	31	25	21	28	23	20
10	48	35	28	23	46	34	27	22	31	25	21	28	23	19	26	21	18

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	2.2
10°-20°	387.8	6.4
20°-30°	579.9	9.6
30°-40°	692.3	11.4
40°-50°	724.4	11.9
50°-60°	679.8	11.2
60°-70°	567.8	9.4
70°-80°	406.0	6.7
80°-90°	242.5	4.0
90°-100°	180.7	3.0
100°-110°	199.0	3.3
110°-120°	223.3	3.7
120°-130°	238.3	3.9
130°-140°	239.1	3.9
140°-150°	220.3	3.6
150°-160°	182.2	3.0
160°-170°	121.2	2.0
170°-180°	42.5	0.7
0°-30°	1103.7	18.2
0°-40°	1796.0	29.6
0°-60°	3200.1	52.8
0°-90°	4416.5	72.8
90°-120°	603.0	9.9
90°-150°	1300.7	21.5
90°-180°	1647.0	27.2
0°-180°	6063.0	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°	38	101	181	231	246	36
105°	92	130	200	244	259	97
115°	158	177	233	271	283	156
125°	224	225	270	301	310	200
135°	288	288	305	332	339	222
145°	347	346	347	359	364	216
155°	395	395	395	397	394	182
165°	430	429	429	431	429	121
175°	448	446	446	448	446	43
180°	449	449	449	449	449	

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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°	29.3	98.6	178.8	231.5	244.8
95°	38.0	101.4	180.7	230.6	246.2
97.5°	49.8	107.8	183.4	231.9	247.2
100°	62.0	114.0	187.7	234.1	250.4
102.5°	76.3	121.0	193.8	238.7	253.9
105°	91.8	130.0	200.3	244.1	258.8
107.5°	108.5	141.7	207.2	250.3	264.1
110°	123.9	152.7	215.9	258.0	269.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.6	163.7	223.1	263.9	278.0
115°	157.6	177.4	232.9	270.8	282.9
117.5°	175.5	188.4	240.8	278.3	289.7
120°	190.5	200.5	250.3	285.8	296.1
122.5°	207.8	212.4	260.1	293.4	303.3
125°	223.9	225.0	269.6	300.9	310.4
127.5°	240.1	240.6	279.0	308.1	317.6
130°	256.3	257.5	287.8	316.0	322.9
132.5°	270.9	273.8	296.5	322.9	332.0
135°	287.5	288.1	304.9	331.7	338.7
137.5°	302.7	302.9	314.9	338.1	344.9
140°	317.0	318.8	323.7	346.9	352.2
142.5°	331.5	331.6	332.3	352.3	358.3
145°	346.6	345.7	346.8	358.9	363.7
147.5°	358.1	359.5	360.5	365.2	369.3
150°	371.8	372.5	373.2	373.2	374.2
152.5°	383.1	384.1	384.5	385.2	383.4
155°	395.1	395.1	395.4	396.8	394.4
157.5°	405.3	404.9	405.3	406.7	404.6
160°	414.8	414.1	414.1	415.8	414.4
162.5°	423.2	422.2	422.5	424.3	421.8
165°	430.3	429.2	429.2	431.4	428.9
167.5°	436.3	434.9	435.2	437.3	435.2
170°	441.2	439.8	439.8	442.3	439.8
172.5°	445.1	443.7	443.7	445.8	443.3
175°	447.6	446.2	446.2	448.3	445.8
177.5°	449.0	447.6	447.6	449.7	447.2
180°	448.6	448.6	448.6	448.6	448.6

(END OF REPORT)