

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: P1011241

Luminaire Tested: S123DIP-B1165D1025UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011241
REPORT IS A COMBINATION OF REPORTS P989322 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB27-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

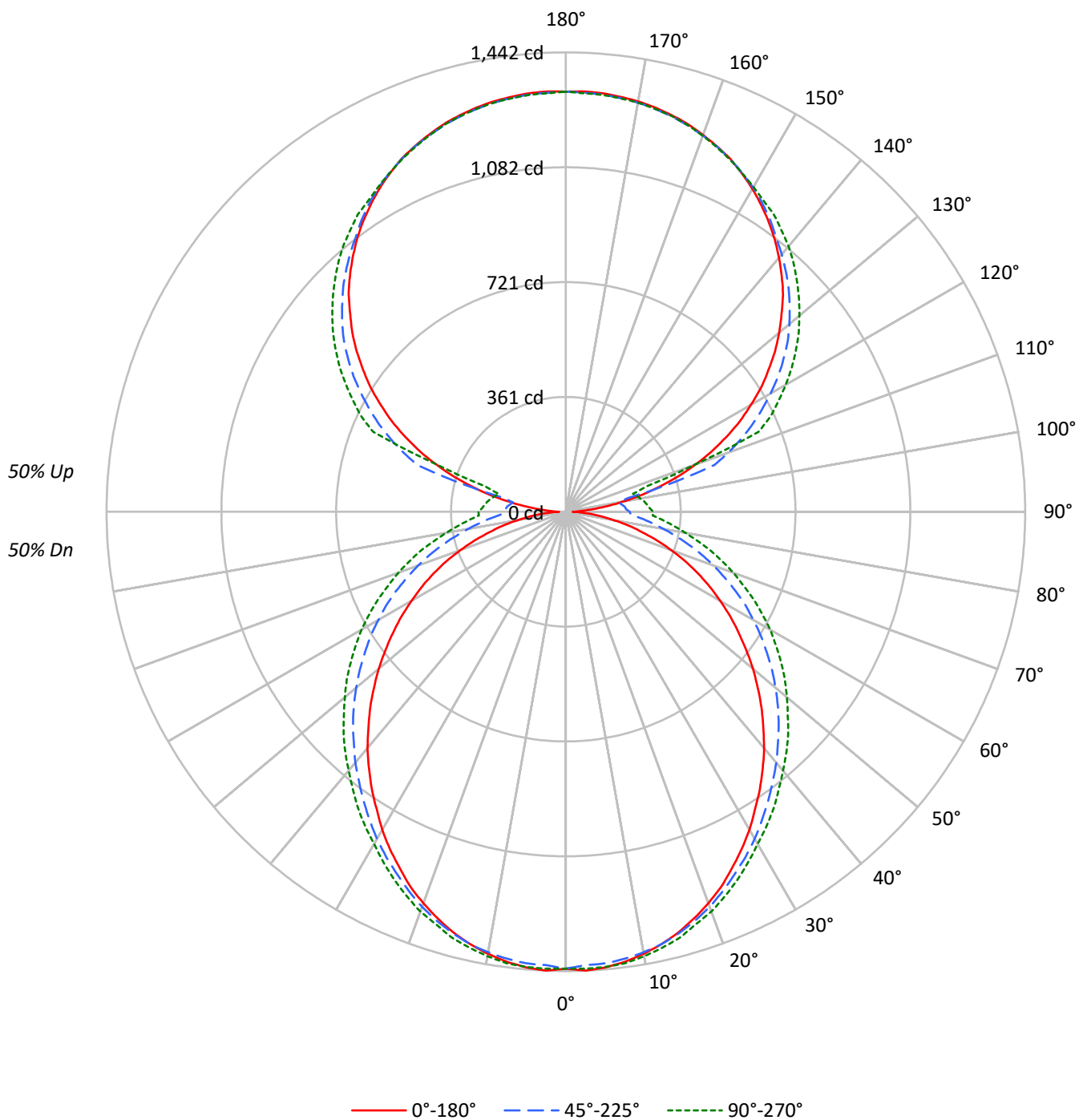
Lumens per Lamp: N/A
Luminaire Lumens: 8842.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 89.8
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

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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
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56
1	97	92	88	84	89	85	81	78	71	69	66		59	57	55		48
2	88	80	73	68	80	74	68	63	62	58	54		51	48	45		42
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		36
4	73	61	53	47	67	57	50	44	48	42	38		40	36	32		32
5	67	55	46	40	61	51	43	37	43	37	33		36	31	28		29
6	61	49	41	35	56	45	38	32	39	33	28		32	28	24		26
7	57	44	36	30	52	41	34	28	35	29	25		29	25	21		24
8	53	40	32	27	48	37	30	25	32	26	22		27	22	19		22
9	49	36	29	24	45	34	27	22	29	24	20		25	20	17		20
10	46	33	26	21	42	31	24	20	27	21	18		23	18	15		19

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	1.5
10°-20°	387.8	4.4
20°-30°	579.9	6.6
30°-40°	692.3	7.8
40°-50°	724.4	8.2
50°-60°	679.8	7.7
60°-70°	567.8	6.4
70°-80°	406.0	4.6
80°-90°	244.2	2.8
90°-100°	198.3	2.2
100°-110°	336.4	3.8
110°-120°	625.5	7.1
120°-130°	742.0	8.4
130°-140°	766.3	8.7
140°-150°	702.7	7.9
150°-160°	563.6	6.4
160°-170°	363.7	4.1
170°-180°	125.3	1.4
0°-30°	1103.7	12.5
0°-40°	1796.0	20.3
0°-60°	3200.1	36.2
0°-90°	4418.2	50.0
90°-120°	1160.2	13.1
90°-150°	3371.2	38.1
90°-180°	4424.0	50.0
0°-180°	8842.0	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	108	200	257	275	18
95°	77	98	185	240	256	85
105°	304	353	332	202	218	322
115°	556	580	645	692	709	549
125°	777	785	834	869	881	695
135°	964	969	990	1021	1026	742
145°	1111	1116	1118	1132	1139	695
155°	1222	1220	1221	1226	1220	563
165°	1288	1286	1284	1292	1286	364
175°	1319	1314	1315	1322	1314	126
180°	1319	1319	1319	1319	1319	

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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°	21.3	107.6	200.0	257.0	274.6
92.5°	41.2	102.6	189.5	247.9	262.9
95°	77.0	97.7	185.0	240.3	255.9
97.5°	124.4	153.2	176.7	231.3	247.9
100°	179.7	249.2	168.2	221.4	238.0
102.5°	242.7	299.2	199.0	210.5	228.0
105°	304.5	352.7	331.7	202.1	218.0
107.5°	368.5	410.1	488.9	380.1	265.9
110°	432.7	468.6	541.9	550.1	422.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.4	524.0	594.2	642.0	654.2
115°	555.5	580.2	645.2	692.5	708.9
117.5°	616.2	635.6	693.6	738.9	752.4
120°	670.5	687.2	741.6	785.4	796.4
122.5°	727.3	737.4	789.7	829.0	840.9
125°	776.8	784.6	833.8	868.6	881.4
127.5°	827.7	833.9	877.9	912.1	921.0
130°	874.7	881.0	916.2	949.7	957.1
132.5°	918.2	926.0	952.5	984.5	992.5
135°	964.3	968.6	989.6	1020.8	1025.6
137.5°	1003.4	1009.8	1022.6	1052.5	1058.4
140°	1041.1	1047.0	1054.5	1082.0	1087.8
142.5°	1077.4	1081.7	1084.6	1107.8	1112.7
145°	1110.7	1116.0	1117.9	1132.4	1138.6
147.5°	1141.4	1146.3	1148.3	1154.9	1156.2
150°	1170.8	1173.8	1175.7	1177.7	1177.8
152.5°	1197.3	1198.3	1199.2	1203.2	1198.3
155°	1221.8	1219.8	1220.8	1225.7	1219.8
157.5°	1241.4	1241.4	1240.4	1246.3	1238.4
160°	1259.0	1258.0	1257.0	1262.9	1256.1
162.5°	1275.7	1272.7	1271.7	1278.6	1272.7
165°	1288.4	1285.5	1284.5	1292.3	1285.5
167.5°	1299.2	1295.3	1295.3	1303.1	1295.3
170°	1308.0	1304.1	1304.1	1311.9	1304.1
172.5°	1313.9	1309.0	1309.9	1317.8	1309.0
175°	1318.8	1313.9	1314.8	1321.7	1313.9
177.5°	1320.7	1315.8	1316.8	1324.6	1314.8
180°	1318.8	1318.8	1318.8	1318.8	1318.8

(END OF REPORT)