

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: P1011243

Luminaire Tested: S123DIP-B1165D1025UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1011243
REPORT IS A COMBINATION OF REPORTS P989324 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B1165D1025UB27-4F0-XX-W2A-D4
Description: Define 3 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

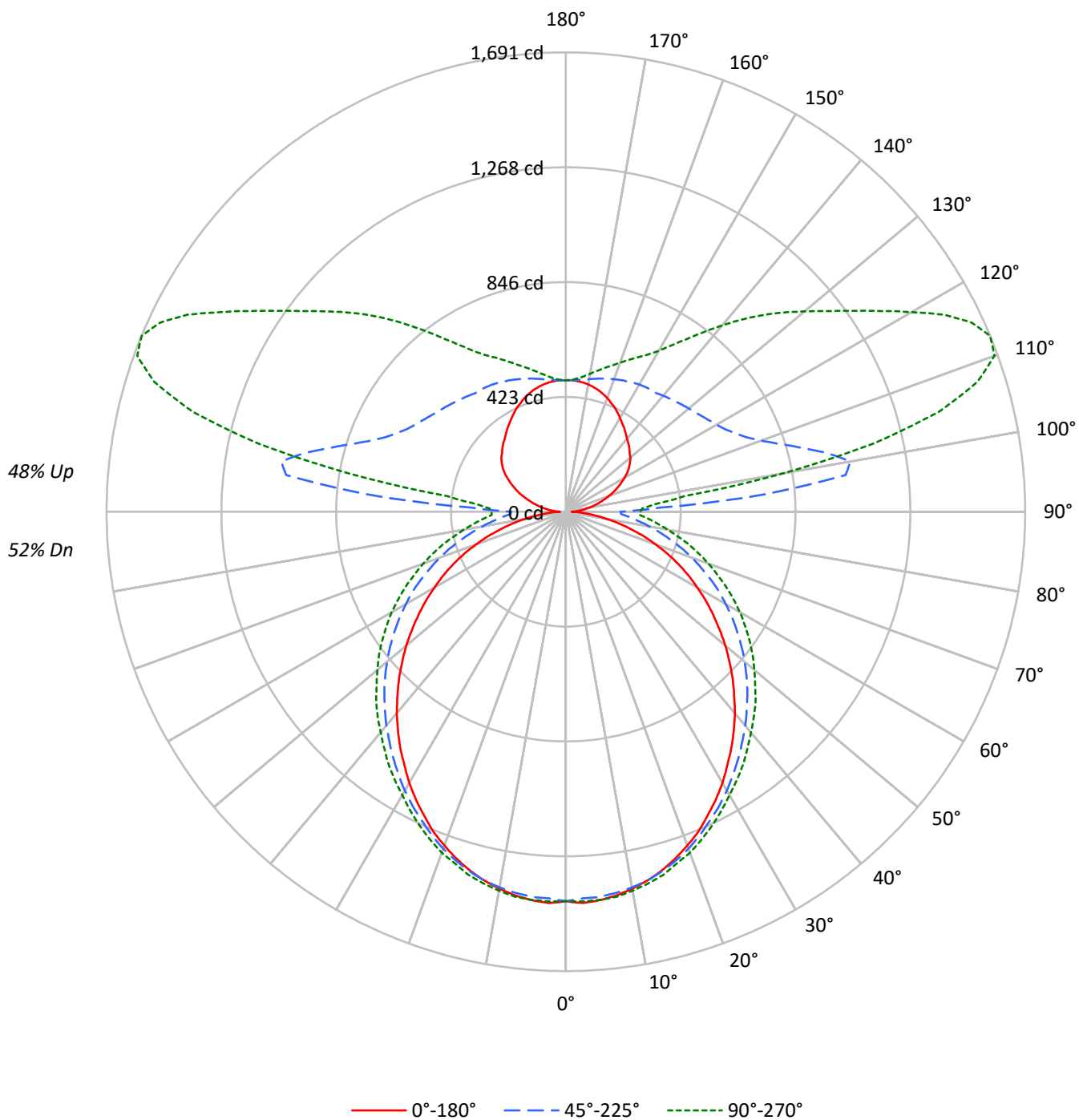
Lumens per Lamp: N/A
Luminaire Lumens: 8470.5 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58
1	97	92	88	84	90	85	82	78	72	70	67	61	59	57	50	48	47
2	88	80	73	68	81	74	68	63	63	59	55	53	49	47	43	41	39
3	80	70	62	56	74	65	58	52	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	39	41	37	33	34	30	28
5	67	55	46	40	62	51	43	38	44	38	33	37	32	28	30	27	24
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21
7	57	44	36	30	52	41	34	29	35	29	25	30	25	22	25	21	19
8	53	40	32	27	49	37	30	25	32	26	22	27	23	19	23	19	17
9	49	37	29	24	45	34	27	22	30	24	20	25	21	17	21	17	15
10	46	34	26	21	42	31	25	20	27	22	18	23	19	16	19	16	13

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	1.6
10°-20°	387.8	4.6
20°-30°	579.9	6.8
30°-40°	692.3	8.2
40°-50°	724.4	8.6
50°-60°	679.8	8.0
60°-70°	567.8	6.7
70°-80°	406.0	4.8
80°-90°	244.3	2.9
90°-100°	426.8	5.0
100°-110°	880.3	10.4
110°-120°	824.1	9.7
120°-130°	639.3	7.5
130°-140°	490.2	5.8
140°-150°	355.5	4.2
150°-160°	245.2	2.9
160°-170°	144.1	1.7
170°-180°	46.9	0.6
0°-30°	1103.7	13.0
0°-40°	1796.0	21.2
0°-60°	3200.1	37.8
0°-90°	4418.2	52.2
90°-120°	2131.1	25.2
90°-150°	3616.1	42.7
90°-180°	4052.0	47.8
0°-180°	8470.5	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°	22	109	201	257	274	17
95°	50	186	736	372	332	49
105°	126	218	905	1538	1421	133
115°	209	277	685	1441	1648	207
125°	284	334	612	1102	1289	253
135°	330	392	573	886	1024	255
145°	375	428	548	701	776	235
155°	424	458	530	602	628	195
165°	463	477	508	538	548	131
175°	483	483	487	494	493	46
180°	484	484	484	484	484	

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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°	22.3	108.6	201.0	257.0	273.6
92.5°	33.4	144.7	346.2	277.8	281.5
95°	50.5	186.4	735.5	372.5	332.3
97.5°	68.5	195.9	1038.7	618.2	440.9
100°	86.6	200.7	1063.6	1072.6	811.0
102.5°	105.6	207.6	990.6	1364.0	1158.7
105°	126.1	218.0	904.7	1538.3	1421.0
107.5°	146.1	231.3	827.8	1608.1	1588.4
110°	168.1	245.2	764.2	1601.3	1679.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.7	260.0	717.6	1534.9	1690.6
115°	208.6	276.9	685.3	1441.4	1648.3
117.5°	229.2	291.2	659.2	1341.8	1570.4
120°	249.2	305.6	640.7	1247.2	1469.3
122.5°	267.8	320.4	626.0	1170.8	1375.7
125°	283.9	334.3	612.3	1101.6	1288.9
127.5°	297.6	350.4	601.6	1043.2	1212.9
130°	310.4	366.0	590.8	988.8	1147.1
132.5°	318.5	380.2	582.1	937.4	1085.4
135°	330.3	392.0	573.2	886.0	1023.6
137.5°	341.1	402.8	565.0	835.4	960.3
140°	350.4	412.6	557.7	787.4	895.7
142.5°	362.1	419.8	549.6	741.3	833.4
145°	374.8	427.6	547.6	700.7	776.0
147.5°	386.0	436.0	544.7	667.4	727.0
150°	398.7	442.8	540.8	640.2	684.0
152.5°	411.5	450.2	535.9	620.6	651.5
155°	424.2	457.5	530.0	602.5	628.0
157.5°	434.0	463.9	525.1	584.9	605.4
160°	445.7	469.3	519.2	568.7	583.9
162.5°	454.6	473.2	513.3	553.5	564.3
165°	463.4	476.6	507.5	538.3	547.6
167.5°	470.2	479.6	501.6	525.1	531.0
170°	476.1	481.0	495.7	513.3	516.3
172.5°	480.0	482.5	490.8	503.0	502.6
175°	483.0	483.4	486.9	493.7	492.8
177.5°	484.9	483.9	483.9	487.9	485.9
180°	483.9	483.9	483.9	483.9	483.9

(END OF REPORT)