

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: P1008769

Luminaire Tested: S122DIP-B290D1080UB27-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1008769
REPORT IS A COMBINATION OF REPORTS P983821 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122DIP-B290D1080UB27-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

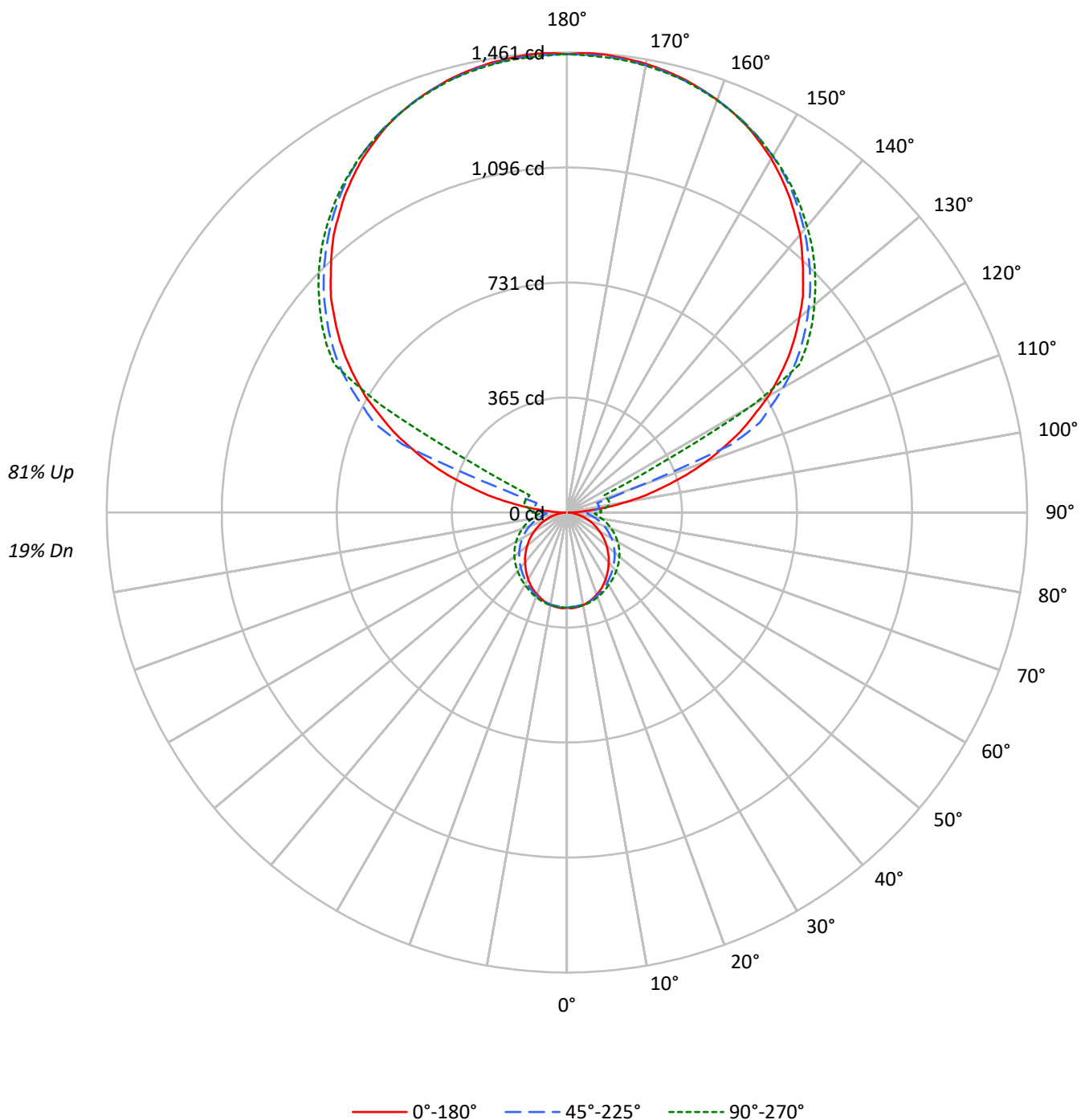
Lumens per Lamp: N/A
Luminaire Lumens: 5424.0 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 48
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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	78	79	76	73	70	57	55	53	39	38	37	23	23	22
2	82	75	69	63	72	66	61	57	49	46	43	34	32	30	20	19	18
3	74	65	58	52	65	58	52	47	43	39	36	30	28	25	18	16	15
4	68	57	50	44	60	51	44	39	38	34	30	27	24	21	16	14	13
5	62	51	43	37	54	45	38	33	34	29	26	24	21	18	14	12	11
6	57	45	38	32	50	40	34	29	30	26	22	21	18	16	13	11	10
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	12	10	8
8	49	37	29	24	43	33	26	22	25	20	17	17	14	12	11	9	7
9	45	33	26	21	40	30	23	19	23	18	15	16	13	11	10	8	7
10	42	30	23	19	37	27	21	17	21	16	13	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4787	4787	4787
5°	4809	4584	4558
10°	4777	4424	4360
15°	4709	4261	4158
20°	4624	4088	3965
25°	4541	3923	3791
30°	4423	3755	3618
35°	4303	3593	3491
40°	4177	3453	3366
45°	4058	3326	3256
50°	3931	3210	3147
55°	3797	3085	3037
60°	3632	2956	2921
65°	3459	2806	2787
70°	3265	2648	2645
75°	3015	2488	2509
80°	2627	2322	2367
85°	2232	2165	2248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4058 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.7	0.5
10°-20°	82.2	1.5
20°-30°	124.6	2.3
30°-40°	151.7	2.8
40°-50°	163.2	3.0
50°-60°	158.5	2.9
60°-70°	138.4	2.6
70°-80°	106.6	2.0
80°-90°	73.9	1.4
90°-100°	97.2	1.8
100°-110°	214.9	4.0
110°-120°	498.3	9.2
120°-130°	800.3	14.8
130°-140°	841.6	15.5
140°-150°	778.0	14.3
150°-160°	624.7	11.5
160°-170°	402.5	7.4
170°-180°	138.5	2.6
0°-30°	235.5	4.3
0°-40°	387.2	7.1
0°-60°	709.0	13.1
0°-90°	1027.9	19.0
90°-120°	810.4	14.9
90°-150°	3230.3	59.6
90°-180°	4396.0	81.0
0°-180°	5424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	303	302	299	302	302	29
15°	289	290	290	294	294	81
25°	263	266	270	275	277	121
35°	227	234	242	252	255	142
45°	186	198	213	227	231	143
55°	142	158	181	197	202	127
65°	97	119	145	163	168	97
75°	54	78	106	125	131	57
85°	16	43	71	89	96	17
90°	6	42	79	102	109	7
95°	72	58	92	113	118	84
105°	322	367	102	129	138	345
115°	607	630	676	202	131	598
125°	857	871	905	924	931	765
135°	1060	1077	1091	1110	1112	819
145°	1229	1228	1246	1256	1253	769
155°	1354	1344	1357	1363	1354	624
165°	1426	1420	1423	1430	1423	403
175°	1459	1451	1454	1461	1450	139
180°	1456	1456	1456	1456	1456	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	302.4	302.4	302.4	302.4	302.4
2.5°	304.6	303.3	300.2	302.4	301.6
5°	303.3	302.0	299.4	302.0	301.6
7.5°	301.1	300.2	298.1	301.1	300.7
10°	298.5	297.6	296.3	299.8	299.4
12.5°	294.1	294.5	293.7	297.2	296.7
15°	289.3	290.2	290.2	294.1	293.7
17.5°	283.2	284.9	286.2	290.2	290.2
20°	277.0	279.2	281.0	285.8	285.8
22.5°	270.4	273.1	275.7	280.5	281.4
25°	263.0	266.1	270.0	275.3	276.6
27.5°	254.2	259.0	263.4	270.0	270.9
30°	245.5	251.2	256.9	263.9	265.2
32.5°	235.8	242.4	249.4	257.7	260.4
35°	226.6	234.1	242.4	252.0	255.1
37.5°	216.5	224.9	235.4	245.9	249.0
40°	206.4	216.1	227.9	239.3	243.3
42.5°	196.8	206.4	220.5	233.2	237.1
45°	185.8	197.7	213.0	226.6	231.0
47.5°	175.3	188.0	205.6	219.6	224.4
50°	164.4	178.0	197.7	212.6	217.4
52.5°	153.8	168.3	189.4	204.7	210.0
55°	142.5	158.2	181.0	196.8	202.5
57.5°	131.5	149.0	171.8	188.9	194.6
60°	119.7	138.5	163.5	180.1	186.3
62.5°	109.1	128.9	153.8	171.8	177.5
65°	97.3	118.8	144.6	162.6	168.3
67.5°	86.8	109.1	135.4	153.4	159.5
70°	75.4	98.2	125.4	144.2	149.5
72.5°	64.9	88.5	116.2	134.6	141.1
75°	53.9	78.5	106.5	125.4	131.1
77.5°	43.4	68.8	97.3	116.2	122.3
80°	32.9	59.6	88.1	106.5	112.6
82.5°	24.1	50.4	79.3	97.7	103.4
85°	15.8	43.0	71.0	89.4	95.6
87.5°	9.6	35.9	64.0	82.0	87.7
90°	5.5	42.4	79.0	101.7	109.1
92.5°	30.2	49.3	79.2	98.4	104.7
95°	72.0	57.8	91.5	113.4	117.6
97.5°	126.3	58.8	101.0	120.5	126.7
100°	189.5	61.4	103.8	128.5	135.5
102.5°	258.5	270.9	102.9	130.2	138.3
105°	322.4	366.7	102.0	128.8	137.9
107.5°	397.2	434.0	101.0	127.4	136.6
110°	468.4	499.2	216.3	125.0	134.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	535.8	561.8	564.0	124.1	132.1
115°	607.4	630.1	676.2	201.6	130.7
117.5°	669.1	693.7	730.0	592.5	321.0
120°	738.6	756.2	792.7	817.6	680.2
122.5°	797.6	814.9	852.2	870.3	875.4
125°	857.2	870.9	904.9	924.1	931.3
127.5°	912.0	926.2	953.9	975.4	980.4
130°	963.6	980.0	1000.7	1022.9	1025.4
132.5°	1016.3	1029.5	1047.6	1067.2	1069.7
135°	1060.0	1076.9	1090.7	1110.5	1111.9
137.5°	1106.4	1119.0	1131.7	1150.7	1150.5
140°	1151.6	1159.7	1172.2	1188.6	1186.0
142.5°	1189.6	1196.5	1210.2	1224.0	1220.9
145°	1229.2	1228.1	1246.0	1256.0	1252.9
147.5°	1263.9	1260.8	1278.7	1284.4	1281.5
150°	1297.7	1290.3	1307.1	1313.5	1308.2
152.5°	1326.1	1317.7	1333.5	1339.8	1332.4
155°	1353.5	1344.0	1356.6	1363.0	1354.5
157.5°	1375.6	1367.2	1376.6	1384.0	1375.6
160°	1394.6	1388.2	1394.6	1400.9	1393.5
162.5°	1411.4	1405.1	1410.4	1417.7	1408.2
165°	1426.2	1419.8	1423.0	1430.4	1423.0
167.5°	1437.7	1431.4	1434.6	1442.0	1432.5
170°	1447.2	1440.9	1443.0	1450.4	1440.9
172.5°	1453.5	1447.2	1449.3	1456.7	1447.2
175°	1458.8	1451.4	1453.5	1460.9	1450.4
177.5°	1460.9	1453.5	1454.6	1462.0	1452.5
180°	1455.6	1455.6	1455.6	1455.6	1455.6

(END OF REPORT)