

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: P999470

Luminaire Tested: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999470
REPORT IS A COMBINATION OF REPORTS P988021 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F
Description: Define 2 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

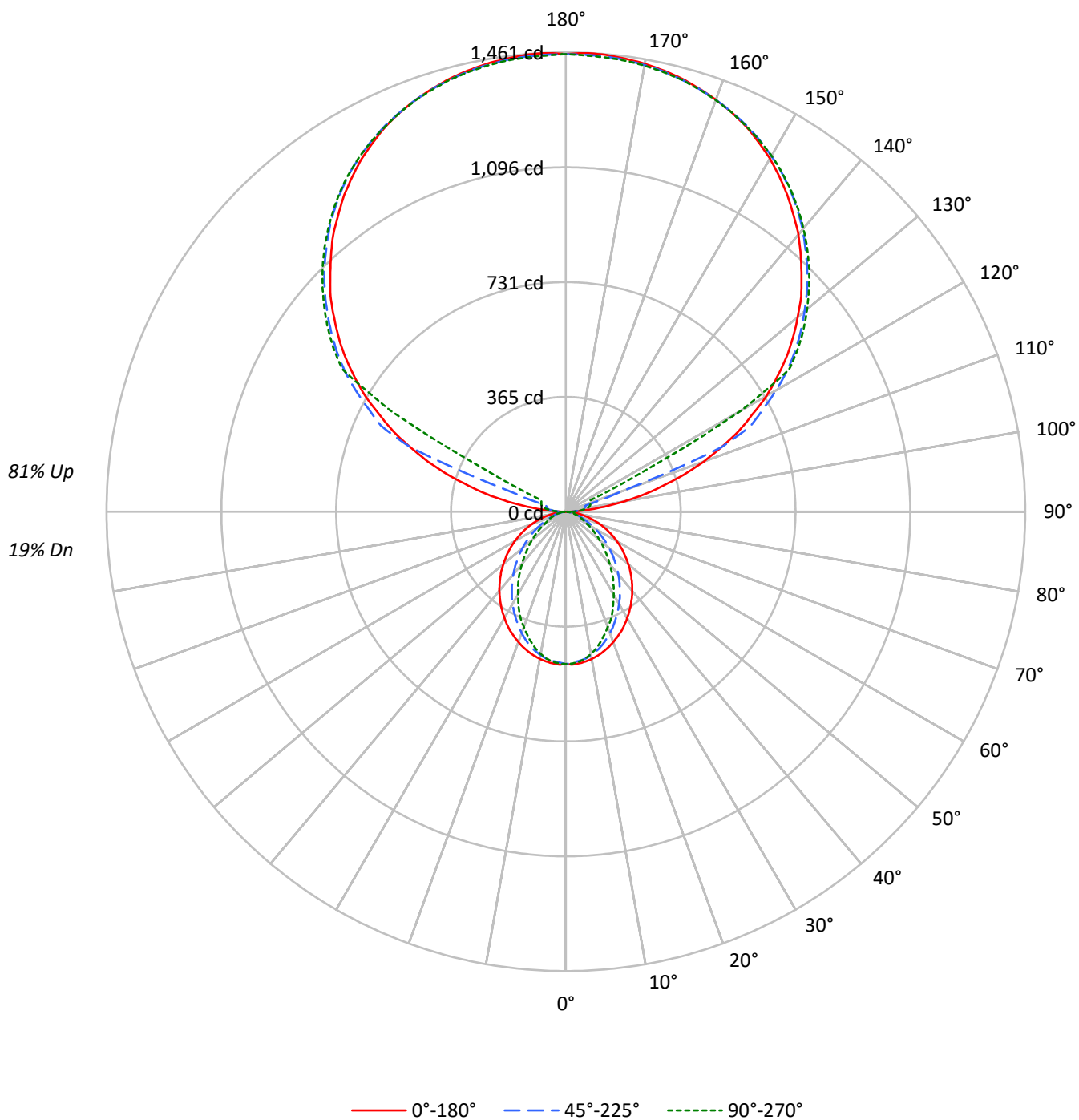
Lumens per Lamp: N/A
Luminaire Lumens: 5266.0 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	91	87	83	80	80	77	74	71	58	56	54	41	39	38	25	24	24
2	83	76	70	66	73	67	63	59	51	48	45	36	34	32	22	21	20
3	76	67	60	55	67	59	54	49	45	41	38	32	29	28	20	18	17
4	69	59	52	46	61	53	46	42	40	36	32	28	26	24	18	16	15
5	63	53	45	39	56	47	40	36	36	31	28	25	23	20	16	14	13
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	14	13	12
7	54	42	35	30	47	38	31	27	29	25	21	21	18	16	13	12	10
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	12	10	9
9	46	35	28	23	41	31	25	21	24	20	17	17	15	12	11	10	8
10	43	32	25	20	38	28	23	19	22	18	15	16	13	11	10	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7666	7666	7666
5°	7679	7293	7239
10°	7603	6918	6689
15°	7498	6473	6062
20°	7360	5968	5406
25°	7218	5451	4805
30°	7029	4945	4151
35°	6843	4437	3587
40°	6653	3938	3008
45°	6432	3421	2502
50°	6206	2924	2037
55°	5969	2427	1617
60°	5693	1942	1223
65°	5375	1481	994
70°	4993	1073	791
75°	4509	820	605
80°	3816	553	406
85°	2656	253	195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6432 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	0.9
10°-20°	124.6	2.4
20°-30°	174.9	3.3
30°-40°	190.7	3.6
40°-50°	175.3	3.3
50°-60°	137.6	2.6
60°-70°	89.6	1.7
70°-80°	46.1	0.9
80°-90°	14.3	0.3
90°-100°	48.0	0.9
100°-110°	178.9	3.4
110°-120°	474.6	9.0
120°-130°	787.1	14.9
130°-140°	836.1	15.9
140°-150°	777.0	14.8
150°-160°	624.7	11.9
160°-170°	402.5	7.6
170°-180°	138.5	2.6
0°-30°	344.9	6.5
0°-40°	535.6	10.2
0°-60°	848.5	16.1
0°-90°	998.5	19.0
90°-120°	701.5	13.3
90°-150°	3101.6	58.9
90°-180°	4267.0	81.0
0°-180°	5266.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	484	484	484	484	484	
5°	484	482	476	480	479	46
15°	461	456	441	433	428	130
25°	418	404	375	357	351	192
35°	360	338	299	272	262	225
45°	294	265	219	188	178	227
55°	224	190	142	116	108	200
65°	151	116	76	61	60	150
75°	81	50	35	32	32	85
85°	19	10	8	8	8	22
90°	1	13	21	26	28	5
95°	68	34	41	46	45	81
105°	320	352	64	76	80	342
115°	606	624	650	162	86	596
125°	856	870	890	897	901	764
135°	1060	1076	1086	1096	1094	819
145°	1229	1228	1246	1253	1248	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°	484.3	484.3	484.3	484.3	484.3
2.5°	486.5	484.3	479.5	483.8	483.0
5°	484.3	482.1	476.4	480.3	479.0
7.5°	480.3	477.7	471.6	473.3	471.1
10°	475.1	472.0	463.3	461.9	459.3
12.5°	468.5	464.6	452.7	450.1	445.3
15°	460.6	455.8	440.9	432.6	428.2
17.5°	451.4	444.4	426.0	416.4	409.3
20°	440.9	432.1	410.2	399.3	389.6
22.5°	429.5	419.4	394.0	379.1	372.5
25°	418.1	404.1	375.2	357.2	350.6
27.5°	404.5	389.6	357.6	337.0	326.9
30°	390.1	373.4	338.3	316.0	304.2
32.5°	376.0	355.9	319.9	293.6	282.7
35°	360.3	337.9	299.3	271.7	262.1
37.5°	344.9	320.8	280.1	249.8	238.9
40°	328.7	302.4	259.9	228.8	217.4
42.5°	312.0	284.0	239.7	207.3	196.3
45°	294.5	265.2	219.1	188.0	177.5
47.5°	277.9	246.7	199.4	168.3	158.7
50°	259.5	228.3	180.1	149.9	140.7
52.5°	241.5	208.6	161.7	132.8	124.5
55°	224.0	189.8	142.4	116.1	107.8
57.5°	206.0	170.9	125.3	100.8	93.8
60°	187.6	152.5	107.4	85.0	78.0
62.5°	169.6	134.5	92.0	71.0	67.5
65°	151.2	115.7	76.3	61.4	60.0
67.5°	133.7	98.2	61.4	53.9	52.6
70°	115.3	81.1	50.8	46.5	44.7
72.5°	97.7	65.3	42.5	39.0	38.1
75°	80.6	50.0	35.1	32.0	31.6
77.5°	63.5	35.5	27.6	25.9	25.0
80°	47.8	25.4	21.0	19.3	19.3
82.5°	33.3	17.1	14.5	13.6	13.6
85°	18.8	9.6	8.3	8.3	8.3
87.5°	7.0	3.5	3.5	3.1	3.1
90°	1.1	12.6	21.1	26.3	28.4
92.5°	26.3	22.1	25.3	27.4	28.4
95°	68.5	33.7	41.1	46.3	45.3
97.5°	123.2	36.9	53.7	56.9	57.9
100°	186.4	42.1	60.0	68.5	70.6
102.5°	255.9	253.8	62.1	73.7	76.9
105°	320.2	351.8	64.3	75.8	80.0
107.5°	395.0	421.3	66.4	77.9	82.2
110°	466.6	488.7	184.3	79.0	83.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.0	553.0	535.1	81.1	84.3
115°	605.6	623.5	649.9	162.2	86.4
117.5°	667.8	688.9	706.8	556.1	280.2
120°	737.3	753.1	772.1	784.7	642.5
122.5°	796.3	813.1	834.2	840.5	841.6
125°	856.3	870.0	890.0	897.4	900.6
127.5°	911.1	925.8	941.6	952.2	953.2
130°	962.7	979.6	991.1	1002.7	1001.7
132.5°	1015.4	1029.1	1040.6	1050.1	1049.1
135°	1059.6	1076.5	1085.9	1096.5	1094.4
137.5°	1106.0	1118.6	1129.1	1139.7	1136.5
140°	1151.2	1159.7	1171.3	1180.7	1175.5
142.5°	1189.2	1196.5	1210.2	1218.7	1213.4
145°	1229.2	1228.1	1246.0	1253.4	1248.1
147.5°	1263.9	1260.8	1278.7	1284.0	1279.7
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)