

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: P999471

Luminaire Tested: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999471
REPORT IS A COMBINATION OF REPORTS P988022 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-F1
Description: Define 2 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

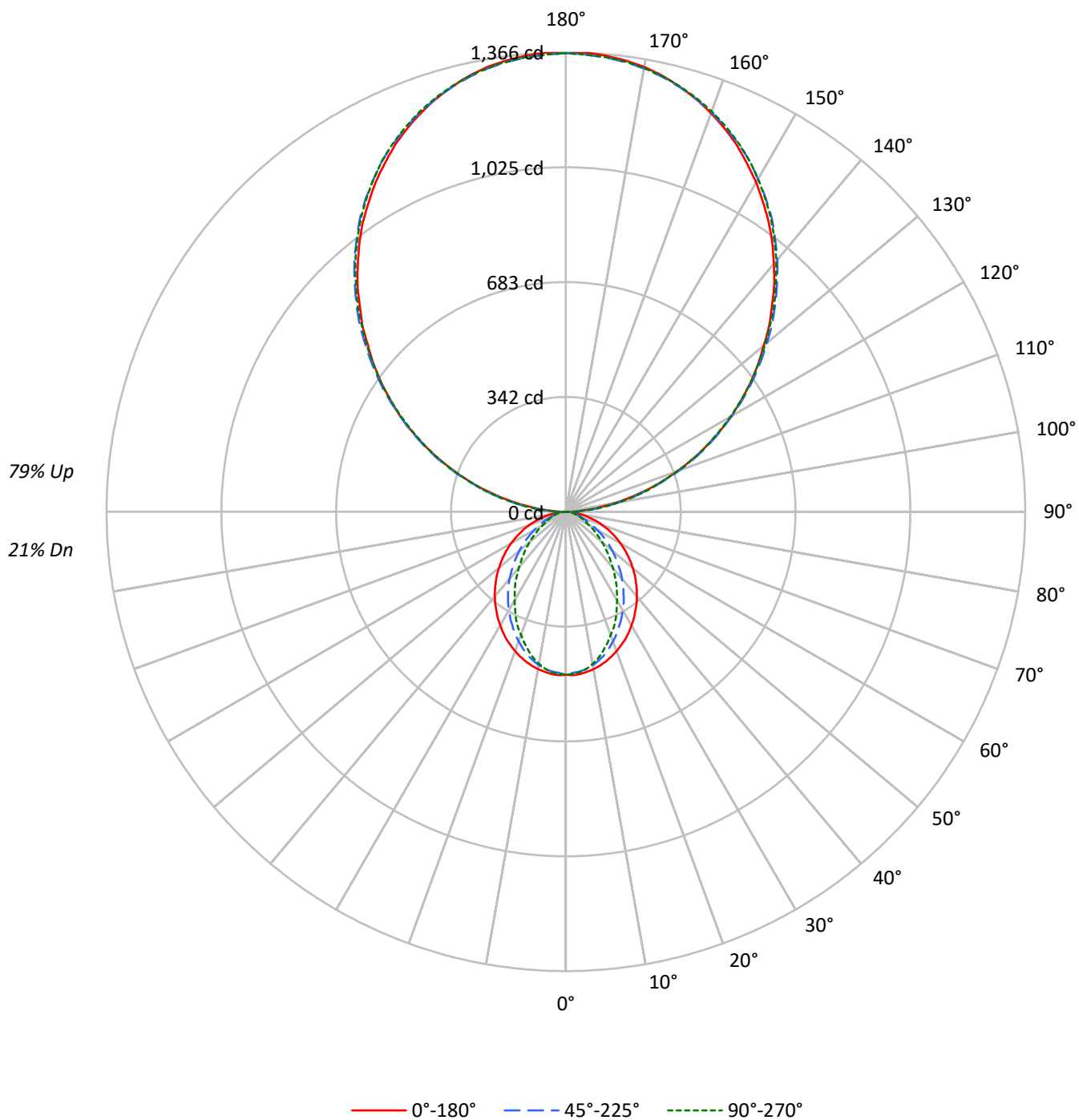
Lumens per Lamp: N/A
Luminaire Lumens: 4813.0 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P999471

CATALOG NUMBER: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P999471

CATALOG NUMBER: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

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	89	89	89	89	67	67	67	47	47	47	29	29	29
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25
2	83	76	71	66	74	68	63	59	52	49	46	37	35	33	23	22	21
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	19	18
4	70	60	52	47	61	53	47	42	41	36	33	29	27	24	19	17	16
5	64	53	45	40	56	47	41	36	36	32	28	26	23	21	17	15	14
6	59	47	40	34	52	42	36	31	33	28	25	24	21	18	15	14	12
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	14	12	11
8	50	39	31	26	44	35	28	24	27	22	19	20	17	14	13	11	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9
10	43	32	25	21	38	29	23	19	22	18	15	17	14	12	11	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

TEST NUMBER: P999471

CATALOG NUMBER: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	0.9
10°-20°	124.6	2.6
20°-30°	174.9	3.6
30°-40°	190.7	4.0
40°-50°	175.3	3.6
50°-60°	137.6	2.9
60°-70°	89.6	1.9
70°-80°	46.1	1.0
80°-90°	15.7	0.3
90°-100°	84.4	1.8
100°-110°	268.2	5.6
110°-120°	458.9	9.5
120°-130°	603.6	12.5
130°-140°	677.5	14.1
140°-150°	664.4	13.8
150°-160°	557.3	11.6
160°-170°	369.6	7.7
170°-180°	129.2	2.7
0°-30°	344.9	7.2
0°-40°	535.6	11.1
0°-60°	848.5	17.6
0°-90°	999.9	20.8
90°-120°	811.5	16.9
90°-150°	2757.0	57.3
90°-180°	3813.0	79.2
0°-180°	4813.0	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	15	40	38	39	5
95°	60	71	74	74	71	67
105°	248	251	253	256	256	261
115°	460	467	465	464	460	455
125°	670	680	677	673	672	599
135°	867	879	882	880	877	670
145°	1052	1060	1067	1068	1064	657
155°	1203	1206	1210	1215	1212	554
165°	1309	1308	1308	1316	1310	369
175°	1362	1358	1356	1364	1357	129
180°	1364	1364	1364	1364	1364	

TEST NUMBER: P999471

CATALOG NUMBER: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

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°	1.2	15.0	40.3	38.0	39.1
92.5°	25.3	34.5	35.7	36.8	36.8
95°	59.8	71.4	73.7	73.7	71.4
97.5°	100.1	110.5	115.1	115.1	115.1
100°	146.2	155.4	158.8	158.8	157.7
102.5°	194.5	201.4	206.0	207.2	206.0
105°	247.5	250.9	253.2	255.5	255.5
107.5°	300.4	305.0	305.0	306.2	300.4
110°	351.0	357.9	357.9	357.9	354.5

TEST NUMBER: P999471

CATALOG NUMBER: SA2XXRDIP-B290D1080UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	406.3	413.2	412.0	408.6	406.3
115°	460.4	467.3	465.0	463.8	460.4
117.5°	514.5	523.7	517.9	514.5	511.0
120°	568.6	577.8	568.6	568.6	565.1
122.5°	618.1	629.6	623.8	620.4	618.1
125°	669.8	680.2	676.8	673.3	672.2
127.5°	720.5	733.2	728.5	723.9	720.5
130°	767.7	782.6	780.3	778.0	773.4
132.5°	820.6	832.1	833.3	827.5	824.1
135°	866.7	879.3	881.6	880.5	877.0
137.5°	917.3	927.7	930.0	928.8	924.2
140°	962.2	972.5	978.3	978.3	973.7
142.5°	1008.2	1018.6	1022.0	1023.2	1018.6
145°	1052.0	1060.0	1066.9	1068.1	1063.5
147.5°	1091.1	1101.5	1106.1	1108.4	1103.8
150°	1131.4	1138.3	1142.9	1146.3	1142.9
152.5°	1167.1	1174.0	1179.7	1184.3	1179.7
155°	1202.7	1206.2	1209.6	1215.4	1211.9
157.5°	1233.8	1236.1	1238.4	1246.5	1240.7
160°	1261.4	1263.7	1264.9	1271.8	1267.2
162.5°	1286.8	1286.8	1287.9	1296.0	1290.2
165°	1308.6	1307.5	1307.5	1315.5	1309.8
167.5°	1328.2	1324.7	1324.7	1332.8	1327.0
170°	1343.2	1339.7	1338.5	1346.6	1339.7
172.5°	1353.5	1350.1	1348.9	1357.0	1350.1
175°	1361.6	1358.1	1355.8	1363.9	1357.0
177.5°	1366.2	1362.7	1360.4	1367.3	1360.4
180°	1363.9	1363.9	1363.9	1363.9	1363.9

(END OF REPORT)