

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: P999497

Luminaire Tested: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999497
REPORT IS A COMBINATION OF REPORTS P988050 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F1
Description: Define 2 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

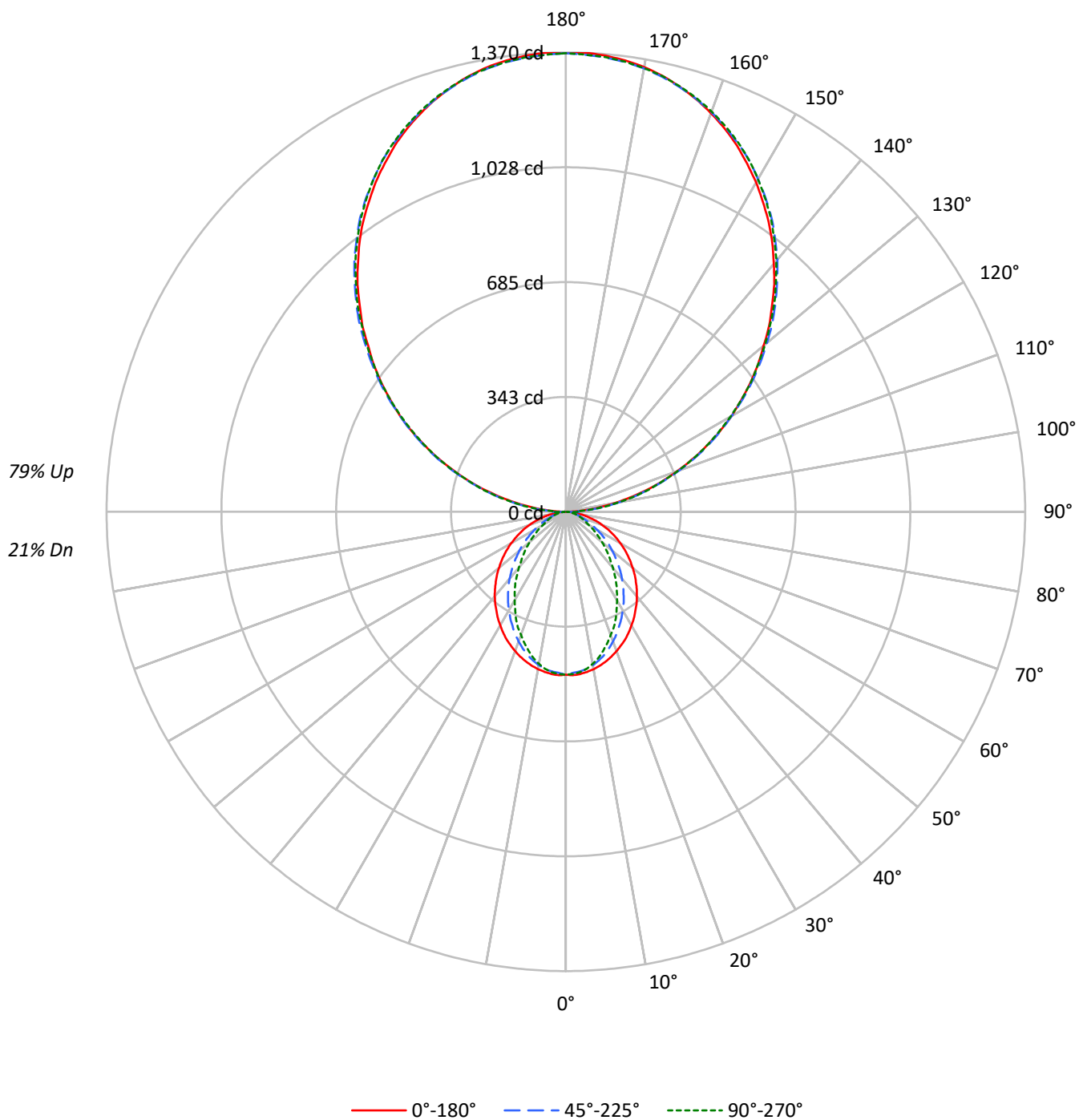
Lumens per Lamp: N/A
Luminaire Lumens: 4827.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	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°	7688	7688	7688
5°	7701	7315	7261
10°	7625	6937	6709
15°	7521	6492	6080
20°	7382	5987	5422
25°	7241	5467	4820
30°	7049	4961	4163
35°	6862	4450	3598
40°	6673	3950	3016
45°	6452	3432	2509
50°	6222	2934	2043
55°	5985	2435	1621
60°	5708	1947	1226
65°	5393	1485	997
70°	5006	1077	793
75°	4526	822	607
80°	3824	556	406
85°	2670	256	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6452 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	0.9
10°-20°	125.0	2.6
20°-30°	175.5	3.6
30°-40°	191.3	4.0
40°-50°	175.8	3.6
50°-60°	138.0	2.9
60°-70°	89.9	1.9
70°-80°	46.3	1.0
80°-90°	15.7	0.3
90°-100°	84.6	1.8
100°-110°	269.0	5.6
110°-120°	460.3	9.5
120°-130°	605.3	12.5
130°-140°	679.5	14.1
140°-150°	666.3	13.8
150°-160°	558.9	11.6
160°-170°	370.7	7.7
170°-180°	129.6	2.7
0°-30°	346.0	7.2
0°-40°	537.2	11.1
0°-60°	851.1	17.6
0°-90°	1002.9	20.8
90°-120°	813.9	16.9
90°-150°	2764.9	57.3
90°-180°	3824.0	79.2
0°-180°	4827.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	486	484	478	482	480	46
15°	462	457	442	434	430	130
25°	419	405	376	358	352	193
35°	361	339	300	272	263	226
45°	295	266	220	189	178	228
55°	225	190	143	116	108	201
65°	152	116	76	62	60	150
75°	81	50	35	32	32	86
85°	19	10	8	8	8	22
90°	1	15	40	38	39	5
95°	60	72	74	74	72	67
105°	248	252	254	256	256	262
115°	462	469	466	465	462	457
125°	672	682	679	675	674	600
135°	869	882	884	883	880	672
145°	1055	1063	1070	1071	1066	659
155°	1206	1210	1213	1219	1215	555
165°	1312	1311	1311	1319	1314	370
175°	1366	1362	1360	1368	1361	130
180°	1368	1368	1368	1368	1368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.7	485.7	485.7	485.7	485.7
2.5°	487.9	485.7	480.9	485.3	484.4
5°	485.7	483.5	477.8	481.8	480.5
7.5°	481.8	479.2	473.0	474.8	472.6
10°	476.5	473.4	464.6	463.3	460.7
12.5°	469.9	466.0	454.1	451.5	446.6
15°	462.0	457.2	442.2	433.9	429.5
17.5°	452.8	445.7	427.3	417.6	410.6
20°	442.2	433.4	411.5	400.5	390.8
22.5°	430.8	420.7	395.2	380.2	373.7
25°	419.4	405.3	376.3	358.3	351.7
27.5°	405.7	390.8	358.7	338.0	327.9
30°	391.2	374.5	339.4	316.9	305.1
32.5°	377.2	356.9	320.9	294.5	283.5
35°	361.3	338.9	300.2	272.5	262.9
37.5°	346.0	321.8	280.9	250.6	239.6
40°	329.7	303.3	260.7	229.5	218.0
42.5°	313.0	284.9	240.5	207.9	196.9
45°	295.4	266.0	219.8	188.6	178.0
47.5°	278.7	247.5	200.0	168.8	159.1
50°	260.2	229.0	180.7	150.3	141.1
52.5°	242.2	209.2	162.2	133.2	124.8
55°	224.6	190.3	142.9	116.5	108.1
57.5°	206.6	171.4	125.7	101.1	94.1
60°	188.1	153.0	107.7	85.3	78.2
62.5°	170.1	135.0	92.3	71.2	67.7
65°	151.7	116.1	76.5	61.5	60.2
67.5°	134.1	98.5	61.5	54.1	52.8
70°	115.6	81.3	51.0	46.6	44.8
72.5°	98.0	65.5	42.6	39.1	38.2
75°	80.9	50.1	35.2	32.1	31.7
77.5°	63.7	35.6	27.7	25.9	25.1
80°	47.9	25.5	21.1	19.3	19.3
82.5°	33.4	17.1	14.5	13.6	13.6
85°	18.9	9.7	8.4	8.4	8.4
87.5°	7.0	3.5	3.5	3.1	3.1
90°	1.2	15.0	40.4	38.1	39.2
92.5°	25.4	34.6	35.8	36.9	36.9
95°	60.0	71.6	73.9	73.9	71.6
97.5°	100.4	110.8	115.4	115.4	115.4
100°	146.6	155.8	159.3	159.3	158.1
102.5°	195.1	202.0	206.6	207.8	206.6
105°	248.2	251.6	253.9	256.2	256.2
107.5°	301.3	305.9	305.9	307.0	301.3
110°	352.0	359.0	359.0	359.0	355.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	407.5	414.4	413.2	409.8	407.5
115°	461.7	468.6	466.3	465.2	461.7
117.5°	516.0	525.2	519.4	516.0	512.5
120°	570.2	579.4	570.2	570.2	566.7
122.5°	619.8	631.4	625.6	622.1	619.8
125°	671.8	682.2	678.7	675.2	674.1
127.5°	722.6	735.3	730.6	726.0	722.6
130°	769.9	784.9	782.6	780.3	775.7
132.5°	823.0	834.5	835.7	829.9	826.5
135°	869.2	881.9	884.2	883.0	879.5
137.5°	919.9	930.3	932.6	931.5	926.9
140°	965.0	975.4	981.1	981.1	976.5
142.5°	1011.1	1021.5	1025.0	1026.1	1021.5
145°	1055.0	1063.1	1070.0	1071.2	1066.5
147.5°	1094.2	1104.6	1109.2	1111.6	1106.9
150°	1134.6	1141.6	1146.2	1149.6	1146.2
152.5°	1170.4	1177.3	1183.1	1187.7	1183.1
155°	1206.2	1209.7	1213.1	1218.9	1215.4
157.5°	1237.4	1239.7	1242.0	1250.1	1244.3
160°	1265.1	1267.4	1268.5	1275.5	1270.8
162.5°	1290.5	1290.5	1291.6	1299.7	1293.9
165°	1312.4	1311.2	1311.2	1319.3	1313.5
167.5°	1332.0	1328.6	1328.6	1336.6	1330.9
170°	1347.0	1343.6	1342.4	1350.5	1343.6
172.5°	1357.4	1353.9	1352.8	1360.9	1353.9
175°	1365.5	1362.0	1359.7	1367.8	1360.9
177.5°	1370.1	1366.6	1364.3	1371.3	1364.3
180°	1367.8	1367.8	1367.8	1367.8	1367.8

(END OF REPORT)