

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: P999510

Luminaire Tested: SA2XXRDIP-B290D330UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999510
REPORT IS A COMBINATION OF REPORTS P988063 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D330UB27-4F0-XX-W2A-F4
Description: Define 2 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}
{m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

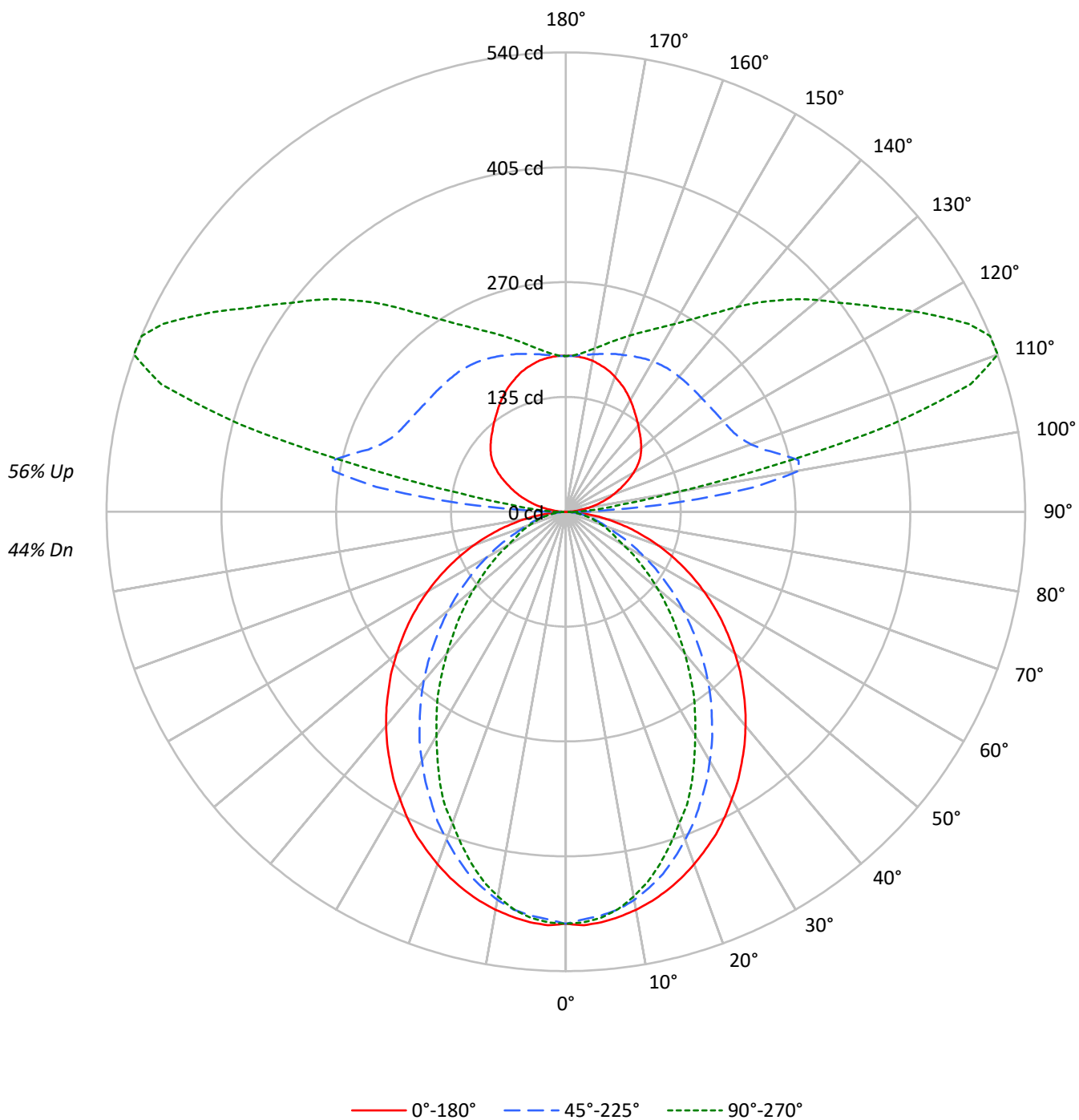
Lumens per Lamp: N/A
Luminaire Lumens: 2274.4 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 22.3
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50
1	97	93	89	86	88	85	82	79	71	68	66	57	56	55	45	44	43
2	88	81	76	71	81	75	70	66	62	59	56	51	48	46	40	39	37
3	81	72	65	59	74	66	60	55	55	51	47	45	42	40	36	34	32
4	74	64	56	51	68	59	52	47	49	45	41	41	37	34	33	30	28
5	68	57	49	44	62	53	46	41	44	39	35	37	33	30	30	27	25
6	63	51	44	38	58	47	41	36	40	35	31	33	29	26	27	24	22
7	58	46	39	33	53	43	36	31	37	31	27	30	26	23	25	22	20
8	54	42	35	30	50	39	33	28	33	28	24	28	24	21	23	20	18
9	50	39	31	26	46	36	29	25	31	26	22	26	22	19	21	18	16
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	20	17	15

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	2.0
10°-20°	124.6	5.5
20°-30°	174.9	7.7
30°-40°	190.7	8.4
40°-50°	175.3	7.7
50°-60°	137.6	6.1
60°-70°	89.6	3.9
70°-80°	46.1	2.0
80°-90°	12.9	0.6
90°-100°	74.3	3.3
100°-110°	251.1	11.0
110°-120°	263.9	11.6
120°-130°	217.0	9.5
130°-140°	174.4	7.7
140°-150°	131.7	5.8
150°-160°	92.6	4.1
160°-170°	54.5	2.4
170°-180°	17.7	0.8
0°-30°	344.9	15.2
0°-40°	535.6	23.5
0°-60°	848.5	37.3
0°-90°	997.2	43.8
90°-120°	589.2	25.9
90°-150°	1112.4	48.9
90°-180°	1277.0	56.1
0°-180°	2274.4	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°	0	5	12	11	12	2
95°	12	30	138	52	40	13
105°	43	65	261	467	397	46
115°	76	96	218	451	522	75
125°	106	125	210	365	424	94
135°	124	148	208	307	351	96
145°	142	163	206	256	280	89
155°	161	174	200	227	236	74
165°	176	181	192	204	207	49
175°	183	183	185	187	186	17
180°	183	183	183	183	183	

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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°	0.4	4.8	12.0	11.4	11.6
92.5°	5.3	16.8	54.3	25.0	21.5
95°	12.3	30.3	138.1	52.2	40.2
97.5°	18.3	40.0	225.1	104.6	67.3
100°	27.1	49.0	278.3	208.4	126.1
102.5°	35.2	57.0	280.1	352.3	245.9
105°	43.0	64.8	261.1	466.6	397.1
107.5°	51.4	72.6	243.4	508.0	498.9
110°	59.9	80.5	231.5	501.4	540.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	67.6	88.1	223.7	478.6	539.7
115°	75.7	95.6	218.4	450.8	522.5
117.5°	84.2	103.2	215.6	424.2	496.4
120°	92.0	110.6	213.1	400.4	471.4
122.5°	99.4	118.2	211.7	381.9	445.3
125°	105.7	125.0	210.0	365.2	423.8
127.5°	111.0	131.6	208.9	350.9	403.7
130°	115.6	137.4	208.2	336.5	387.2
132.5°	119.8	143.0	207.9	321.4	369.9
135°	124.0	148.0	207.5	306.8	351.3
137.5°	127.9	152.2	207.5	292.1	333.3
140°	132.5	156.1	207.2	279.0	314.6
142.5°	137.0	159.2	207.2	266.5	295.9
145°	141.6	162.8	206.5	256.3	280.4
147.5°	146.6	165.6	205.4	247.3	266.7
150°	151.5	168.4	204.3	239.6	254.7
152.5°	156.4	171.2	202.6	233.0	244.5
155°	161.0	173.8	200.5	226.8	235.7
157.5°	164.9	176.0	198.4	220.7	227.9
160°	168.8	178.1	196.2	214.8	220.5
162.5°	172.6	179.7	194.5	209.1	213.5
165°	175.5	180.8	192.0	203.6	206.8
167.5°	177.9	181.8	189.9	198.7	200.5
170°	180.4	182.3	188.1	194.2	194.8
172.5°	181.8	182.8	186.0	190.0	190.2
175°	182.8	183.0	184.6	186.9	186.4
177.5°	183.6	183.2	183.2	184.6	183.6
180°	183.2	183.2	183.2	183.2	183.2

(END OF REPORT)