

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: P999509

Luminaire Tested: SA2XXRDIP-B290D330UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999509
REPORT IS A COMBINATION OF REPORTS P988062 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D330UB27-4F0-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

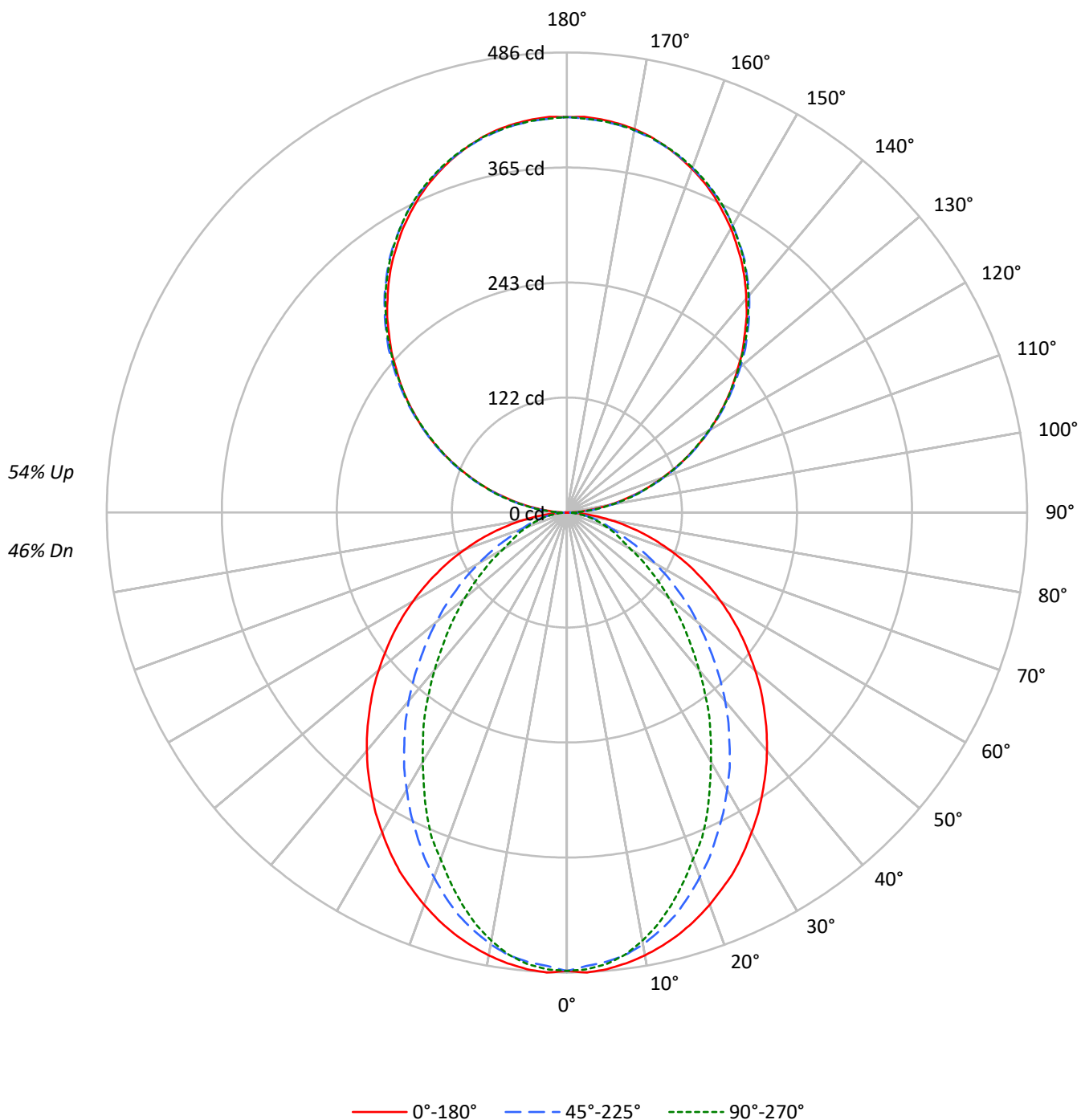
Lumens per Lamp: N/A
Luminaire Lumens: 2165.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	53	53	53	46		
1	97	93	89	86	89	86	83	80	72	70	67	59	57	56	47	46	45	40		
2	89	82	76	71	81	75	70	66	63	60	57	52	50	47	42	40	39	34		
3	81	72	65	60	75	67	61	56	56	52	48	47	43	41	38	35	33	29		
4	75	64	57	51	68	59	53	48	50	45	41	42	38	35	34	31	29	26		
5	69	57	50	44	63	53	46	41	45	40	36	38	34	31	31	28	26	22		
6	63	52	44	38	58	48	41	36	41	36	32	34	30	27	28	25	23	20		
7	59	47	39	34	54	43	37	32	37	32	28	31	27	24	26	23	20	18		
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	18	16		
9	51	39	32	27	47	36	30	25	31	26	22	26	22	20	22	19	17	15		
10	48	36	29	24	44	33	27	23	29	24	20	25	21	18	20	17	15	13		

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	2.1
10°-20°	124.6	5.8
20°-30°	174.9	8.1
30°-40°	190.7	8.8
40°-50°	175.3	8.1
50°-60°	137.6	6.4
60°-70°	89.6	4.1
70°-80°	46.1	2.1
80°-90°	13.0	0.6
90°-100°	25.8	1.2
100°-110°	82.1	3.8
110°-120°	140.6	6.5
120°-130°	184.8	8.5
130°-140°	207.5	9.6
140°-150°	203.5	9.4
150°-160°	170.7	7.9
160°-170°	113.2	5.2
170°-180°	39.6	1.8
0°-30°	344.9	15.9
0°-40°	535.6	24.7
0°-60°	848.5	39.2
0°-90°	997.2	46.1
90°-120°	248.5	11.5
90°-150°	844.4	39.0
90°-180°	1168.0	54.0
0°-180°	2165.0	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°	0	5	12	12	12	2
95°	18	22	23	23	22	20
105°	76	77	78	78	78	80
115°	141	143	142	142	141	139
125°	205	208	207	206	206	183
135°	265	269	270	270	269	205
145°	322	325	327	327	326	201
155°	368	369	370	372	371	170
165°	401	400	400	403	401	113
175°	417	416	415	418	416	40
180°	418	418	418	418	418	

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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	4.6	12.3	11.6	12.0
92.5°	7.8	10.6	10.9	11.3	11.3
95°	18.3	21.9	22.6	22.6	21.9
97.5°	30.7	33.8	35.2	35.2	35.2
100°	44.8	47.6	48.6	48.6	48.3
102.5°	59.6	61.7	63.1	63.4	63.1
105°	75.8	76.8	77.5	78.3	78.3
107.5°	92.0	93.4	93.4	93.8	92.0
110°	107.5	109.6	109.6	109.6	108.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	124.4	126.5	126.2	125.1	124.4
115°	141.0	143.1	142.4	142.1	141.0
117.5°	157.6	160.4	158.6	157.6	156.5
120°	174.1	176.9	174.1	174.1	173.1
122.5°	189.3	192.8	191.0	190.0	189.3
125°	205.1	208.3	207.3	206.2	205.9
127.5°	220.7	224.5	223.1	221.7	220.7
130°	235.1	239.7	239.0	238.3	236.9
132.5°	251.3	254.9	255.2	253.4	252.4
135°	265.4	269.3	270.0	269.7	268.6
137.5°	280.9	284.1	284.8	284.5	283.0
140°	294.7	297.9	299.6	299.6	298.2
142.5°	308.8	312.0	313.0	313.4	312.0
145°	322.2	324.6	326.8	327.1	325.7
147.5°	334.2	337.3	338.7	339.4	338.0
150°	346.5	348.6	350.0	351.1	350.0
152.5°	357.4	359.5	361.3	362.7	361.3
155°	368.4	369.4	370.5	372.2	371.2
157.5°	377.9	378.6	379.3	381.7	380.0
160°	386.3	387.0	387.4	389.5	388.1
162.5°	394.1	394.1	394.4	396.9	395.1
165°	400.8	400.4	400.4	402.9	401.1
167.5°	406.8	405.7	405.7	408.2	406.4
170°	411.4	410.3	409.9	412.4	410.3
172.5°	414.5	413.5	413.1	415.6	413.5
175°	417.0	415.9	415.2	417.7	415.6
177.5°	418.4	417.3	416.6	418.8	416.6
180°	417.7	417.7	417.7	417.7	417.7

(END OF REPORT)