

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: P999503

Luminaire Tested: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999503
REPORT IS A COMBINATION OF REPORTS P988056 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F1
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

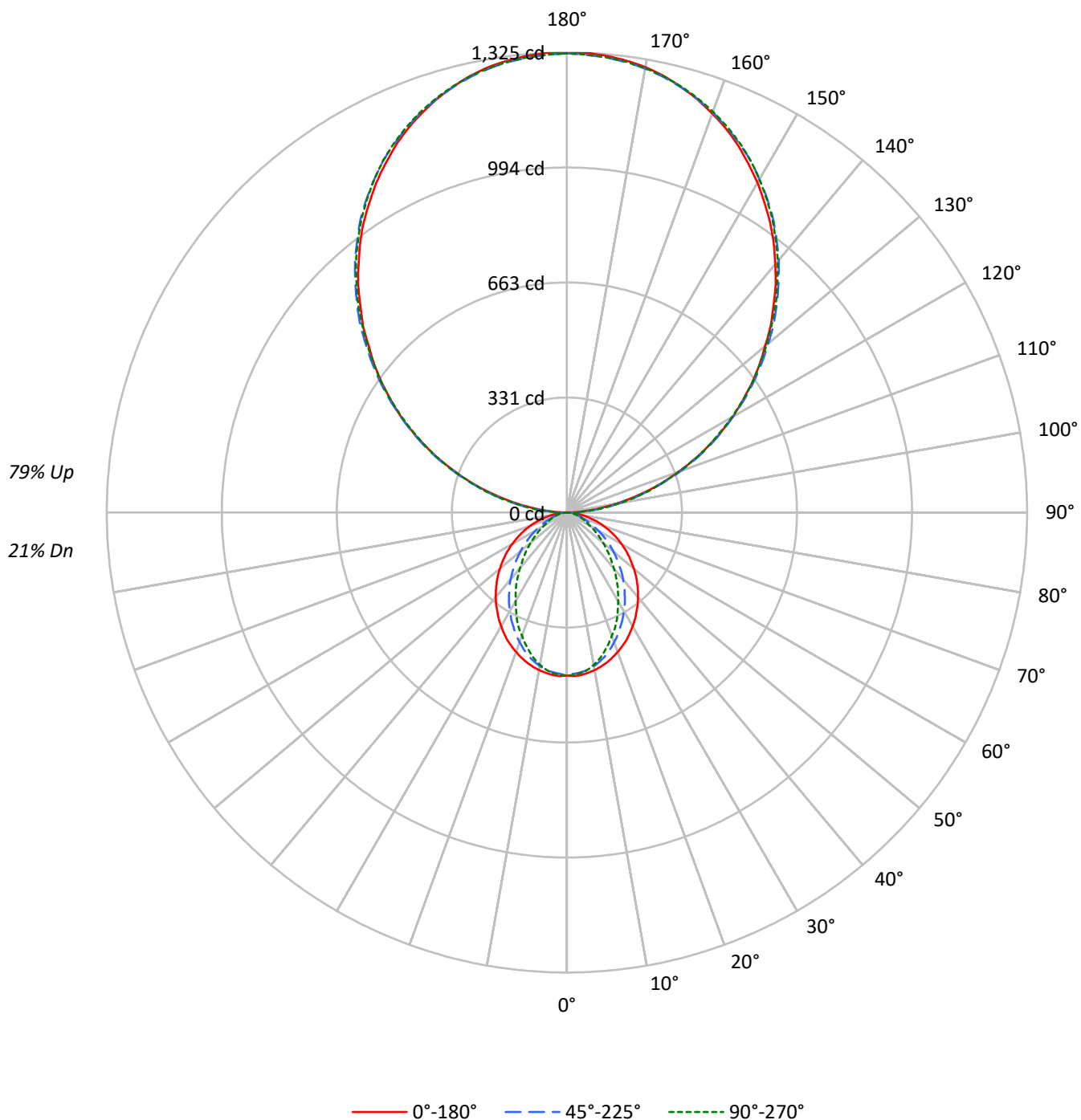
Lumens per Lamp: N/A
Luminaire Lumens: 4668.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	7435	7435	7435
5°	7447	7073	7021
10°	7374	6709	6488
15°	7272	6278	5879
20°	7138	5789	5243
25°	7001	5287	4661
30°	6816	4798	4025
35°	6636	4303	3479
40°	6452	3820	2916
45°	6238	3318	2427
50°	6017	2836	1975
55°	5788	2354	1569
60°	5520	1882	1187
65°	5212	1436	964
70°	4842	1041	768
75°	4375	794	586
80°	3696	538	393
85°	2585	247	190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6238 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	0.9
10°-20°	120.8	2.6
20°-30°	169.7	3.6
30°-40°	184.9	4.0
40°-50°	170.0	3.6
50°-60°	133.5	2.9
60°-70°	86.9	1.9
70°-80°	44.7	1.0
80°-90°	15.2	0.3
90°-100°	81.8	1.8
100°-110°	260.1	5.6
110°-120°	445.1	9.5
120°-130°	585.4	12.5
130°-140°	657.1	14.1
140°-150°	644.4	13.8
150°-160°	540.5	11.6
160°-170°	358.5	7.7
170°-180°	125.3	2.7
0°-30°	334.5	7.2
0°-40°	519.5	11.1
0°-60°	823.0	17.6
0°-90°	969.8	20.8
90°-120°	787.0	16.9
90°-150°	2673.9	57.3
90°-180°	3698.0	79.2
0°-180°	4668.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	470	468	462	466	465	45
15°	447	442	428	420	415	126
25°	406	392	364	346	340	186
35°	349	328	290	264	254	219
45°	286	257	212	182	172	221
55°	217	184	138	113	105	194
65°	147	112	74	60	58	145
75°	78	48	34	31	31	83
85°	18	9	8	8	8	21
90°	1	14	39	37	38	5
95°	58	69	71	71	69	65
105°	240	243	246	248	248	253
115°	446	453	451	450	446	442
125°	650	660	656	653	652	581
135°	840	853	855	854	851	650
145°	1020	1028	1035	1036	1031	637
155°	1166	1170	1173	1179	1175	537
165°	1269	1268	1268	1276	1270	358
175°	1320	1317	1315	1323	1316	125
180°	1323	1323	1323	1323	1323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.7	469.7	469.7	469.7	469.7
2.5°	471.8	469.7	465.0	469.3	468.4
5°	469.7	467.6	462.0	465.9	464.6
7.5°	465.9	463.3	457.4	459.1	456.9
10°	460.8	457.8	449.3	448.0	445.5
12.5°	454.4	450.6	439.1	436.5	431.9
15°	446.7	442.1	427.6	419.5	415.3
17.5°	437.8	431.0	413.2	403.8	397.0
20°	427.6	419.1	397.9	387.2	377.9
22.5°	416.6	406.8	382.1	367.7	361.3
25°	405.5	391.9	363.9	346.4	340.1
27.5°	392.3	377.9	346.9	326.9	317.1
30°	378.3	362.2	328.2	306.5	295.0
32.5°	364.7	345.2	310.3	284.8	274.2
35°	349.4	327.7	290.3	263.5	254.2
37.5°	334.5	311.2	271.6	242.3	231.7
40°	318.8	293.3	252.1	221.9	210.8
42.5°	302.6	275.4	232.5	201.1	190.4
45°	285.6	257.2	212.5	182.4	172.2
47.5°	269.5	239.3	193.4	163.2	153.9
50°	251.6	221.5	174.7	145.4	136.4
52.5°	234.2	202.3	156.9	128.8	120.7
55°	217.2	184.1	138.1	112.6	104.6
57.5°	199.8	165.8	121.6	97.8	91.0
60°	181.9	147.9	104.1	82.5	75.7
62.5°	164.5	130.5	89.3	68.9	65.5
65°	146.6	112.2	74.0	59.5	58.2
67.5°	129.6	95.2	59.5	52.3	51.0
70°	111.8	78.6	49.3	45.1	43.4
72.5°	94.8	63.3	41.2	37.8	37.0
75°	78.2	48.5	34.0	31.0	30.6
77.5°	61.6	34.4	26.8	25.1	24.2
80°	46.3	24.7	20.4	18.7	18.7
82.5°	32.3	16.6	14.0	13.2	13.2
85°	18.3	9.4	8.1	8.1	8.1
87.5°	6.8	3.4	3.4	3.0	3.0
90°	1.1	14.5	39.1	36.8	38.0
92.5°	24.6	33.5	34.6	35.7	35.7
95°	58.0	69.2	71.4	71.4	69.2
97.5°	97.1	107.2	111.6	111.6	111.6
100°	141.8	150.7	154.0	154.0	152.9
102.5°	188.6	195.3	199.8	200.9	199.8
105°	240.0	243.3	245.6	247.8	247.8
107.5°	291.3	295.8	295.8	296.9	291.3
110°	340.5	347.2	347.2	347.2	343.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.0	400.7	399.6	396.3	394.0
115°	446.5	453.2	451.0	449.9	446.5
117.5°	499.0	507.9	502.3	499.0	495.6
120°	551.4	560.4	551.4	551.4	548.1
122.5°	599.4	610.6	605.0	601.7	599.4
125°	649.7	659.7	656.4	653.0	651.9
127.5°	698.8	711.1	706.6	702.1	698.8
130°	744.6	759.1	756.8	754.6	750.1
132.5°	795.9	807.1	808.2	802.6	799.2
135°	840.5	852.8	855.1	853.9	850.6
137.5°	889.7	899.7	901.9	900.8	896.4
140°	933.2	943.2	948.8	948.8	944.4
142.5°	977.9	987.9	991.2	992.4	987.9
145°	1020.3	1028.1	1034.8	1035.9	1031.4
147.5°	1058.2	1068.3	1072.7	1075.0	1070.5
150°	1097.3	1104.0	1108.5	1111.8	1108.5
152.5°	1131.9	1138.6	1144.2	1148.6	1144.2
155°	1166.5	1169.8	1173.2	1178.8	1175.4
157.5°	1196.6	1198.9	1201.1	1208.9	1203.3
160°	1223.4	1225.7	1226.8	1233.5	1229.0
162.5°	1248.0	1248.0	1249.1	1256.9	1251.3
165°	1269.2	1268.1	1268.1	1275.9	1270.3
167.5°	1288.2	1284.8	1284.8	1292.6	1287.1
170°	1302.7	1299.3	1298.2	1306.0	1299.3
172.5°	1312.7	1309.4	1308.3	1316.1	1309.4
175°	1320.5	1317.2	1315.0	1322.8	1316.1
177.5°	1325.0	1321.7	1319.4	1326.1	1319.4
180°	1322.8	1322.8	1322.8	1322.8	1322.8

(END OF REPORT)