

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: P999502

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999502
REPORT IS A COMBINATION OF REPORTS P988055 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-F
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

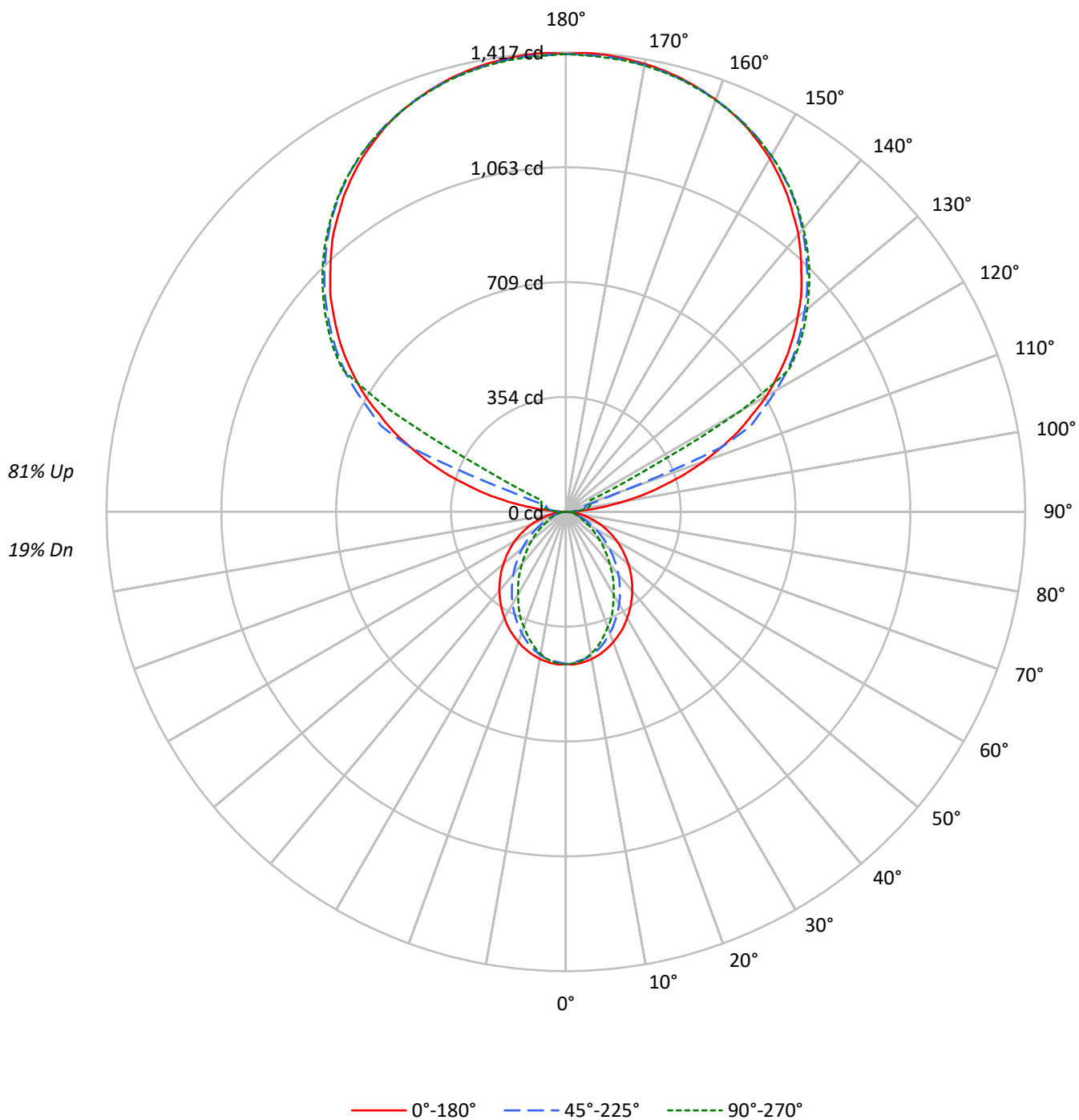
Lumens per Lamp: N/A
Luminaire Lumens: 5107.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	39	38	25	24	24
2	83	76	70	66	73	67	63	59	51	48	45	36	34	32	22	21	20
3	76	67	60	55	67	59	54	49	45	41	38	32	29	28	20	18	17
4	69	59	52	46	61	53	46	42	40	36	32	28	26	24	18	16	15
5	63	53	45	39	56	47	40	36	36	31	28	25	23	20	16	14	13
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	14	13	12
7	54	42	35	30	47	38	31	27	29	25	21	21	18	16	13	12	10
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	12	10	9
9	46	35	28	23	41	31	25	21	24	20	17	17	15	12	11	10	8
10	43	32	25	20	38	28	23	19	22	18	15	16	13	11	10	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	2.4
20°-30°	169.7	3.3
30°-40°	184.9	3.6
40°-50°	170.0	3.3
50°-60°	133.5	2.6
60°-70°	86.9	1.7
70°-80°	44.7	0.9
80°-90°	13.9	0.3
90°-100°	46.6	0.9
100°-110°	173.5	3.4
110°-120°	460.2	9.0
120°-130°	763.3	14.9
130°-140°	810.8	15.9
140°-150°	753.6	14.8
150°-160°	605.8	11.9
160°-170°	390.4	7.6
170°-180°	134.4	2.6
0°-30°	334.5	6.6
0°-40°	519.5	10.2
0°-60°	823.0	16.1
0°-90°	968.5	19.0
90°-120°	680.3	13.3
90°-150°	3007.9	58.9
90°-180°	4139.0	81.0
0°-180°	5107.0	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	12	20	26	28	5
95°	66	33	40	45	44	79
105°	310	341	62	74	78	332
115°	587	605	630	157	84	578
125°	830	844	863	870	873	741
135°	1028	1044	1053	1063	1061	794
145°	1192	1191	1208	1216	1210	746
155°	1313	1303	1316	1322	1314	605
165°	1383	1377	1380	1387	1380	391
175°	1415	1408	1410	1417	1407	135
180°	1412	1412	1412	1412	1412	

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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°	1.0	12.3	20.4	25.5	27.6
92.5°	25.5	21.5	24.5	26.6	27.6
95°	66.4	32.7	39.8	44.9	43.9
97.5°	119.5	35.8	52.1	55.2	56.2
100°	180.8	40.9	58.2	66.4	68.4
102.5°	248.2	246.2	60.3	71.5	74.6
105°	310.5	341.2	62.3	73.5	77.6
107.5°	383.1	408.6	64.4	75.6	79.7
110°	452.5	474.0	178.8	76.6	80.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	517.9	536.3	518.9	78.7	81.7
115°	587.3	604.7	630.2	157.3	83.8
117.5°	647.6	668.0	685.4	539.3	271.7
120°	715.0	730.3	748.7	761.0	623.1
122.5°	772.2	788.6	809.0	815.1	816.2
125°	830.5	843.7	863.1	870.3	873.4
127.5°	883.6	897.9	913.2	923.4	924.4
130°	933.6	950.0	961.2	972.4	971.4
132.5°	984.7	998.0	1009.2	1018.4	1017.4
135°	1027.6	1043.9	1053.1	1063.3	1061.3
137.5°	1072.5	1084.8	1095.0	1105.2	1102.2
140°	1116.5	1124.6	1135.9	1145.1	1140.0
142.5°	1153.2	1160.4	1173.7	1181.8	1176.7
145°	1192.1	1191.0	1208.4	1215.5	1210.4
147.5°	1225.8	1222.7	1240.1	1245.2	1241.1
150°	1258.4	1251.3	1267.6	1273.8	1268.7
152.5°	1286.0	1277.9	1293.2	1299.3	1292.2
155°	1312.6	1303.4	1315.7	1321.8	1313.6
157.5°	1334.0	1325.9	1335.1	1342.2	1334.0
160°	1352.4	1346.3	1352.4	1358.6	1351.4
162.5°	1368.8	1362.6	1367.7	1374.9	1365.7
165°	1383.1	1376.9	1380.0	1387.2	1380.0
167.5°	1394.3	1388.2	1391.2	1398.4	1389.2
170°	1403.5	1397.4	1399.4	1406.6	1397.4
172.5°	1409.6	1403.5	1405.5	1412.7	1403.5
175°	1414.7	1407.6	1409.6	1416.8	1406.6
177.5°	1416.8	1409.6	1410.6	1417.8	1408.6
180°	1411.7	1411.7	1411.7	1411.7	1411.7

(END OF REPORT)