

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: P1000177

Luminaire Tested: SA2XXRDIP-B865D530UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000177
REPORT IS A COMBINATION OF REPORTS P988737 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B865D530UB50-4F0-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

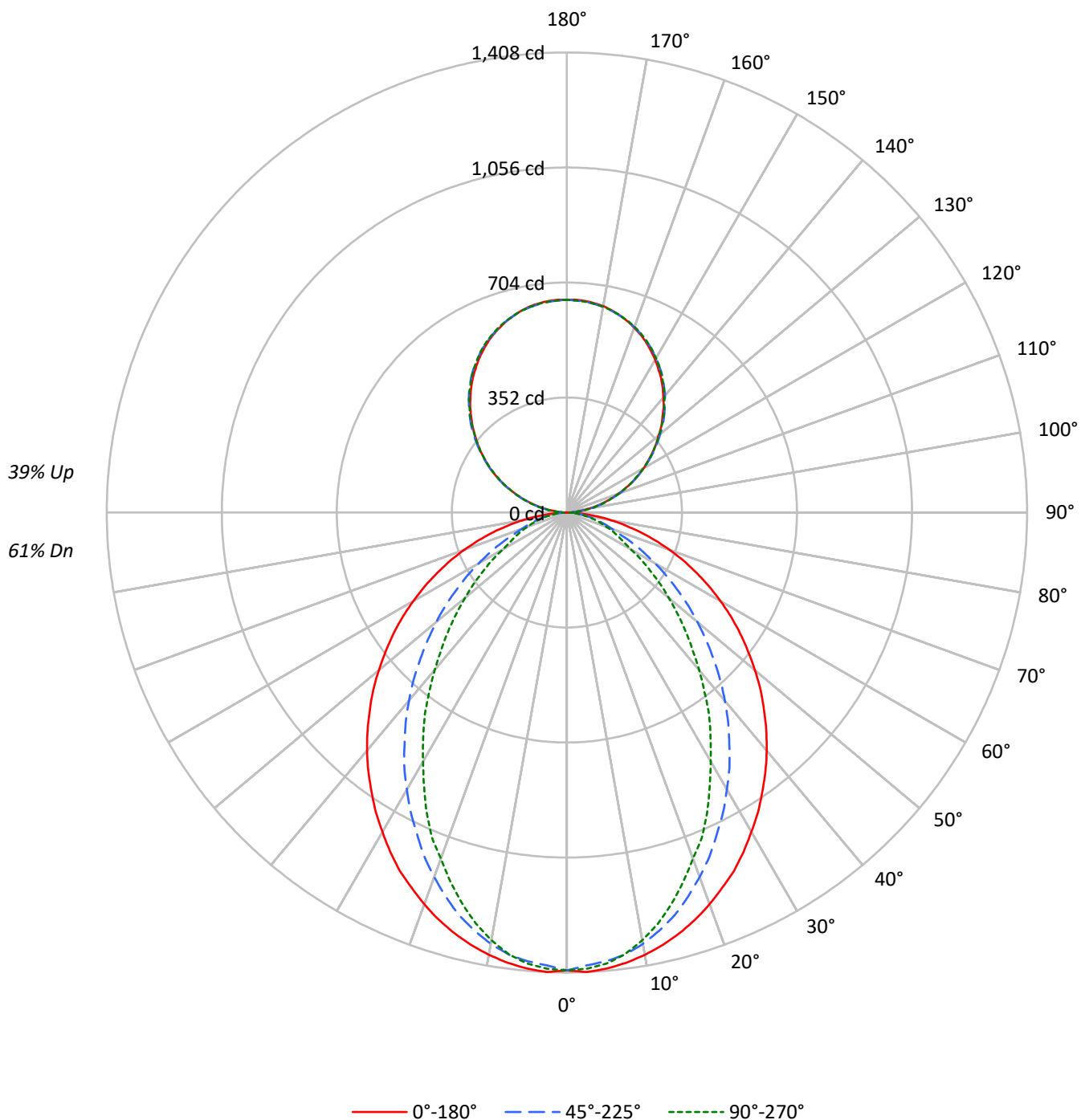
Lumens per Lamp: N/A
Luminaire Lumens: 4704.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	97	93	90	94	91	87	85	80	77	75	69	67	66	60	58	57
2	92	85	79	74	86	80	75	70	70	66	63	62	59	56	53	51	49
3	85	75	68	63	79	71	65	60	63	58	54	55	51	48	48	45	43
4	78	67	59	54	73	63	56	51	56	51	46	49	45	42	43	40	37
5	72	60	52	46	67	57	50	44	51	45	40	45	40	37	39	36	33
6	66	54	46	41	62	51	44	39	46	40	36	41	36	32	36	32	29
7	61	49	41	36	58	47	40	35	42	36	32	37	32	29	33	29	26
8	57	45	37	32	54	43	36	31	38	33	28	34	29	26	30	26	24
9	53	41	34	29	50	39	32	28	35	30	26	32	27	24	28	24	22
10	50	38	31	26	47	36	30	25	33	27	23	29	25	22	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22182	22182	22182
5°	22218	21103	20947
10°	21999	20016	19354
15°	21696	18731	17540
20°	21297	17270	15642
25°	20886	15770	13905
30°	20337	14311	12008
35°	19797	12840	10380
40°	19249	11394	8702
45°	18612	9901	7239
50°	17954	8462	5894
55°	17267	7025	4679
60°	16471	5617	3539
65°	15553	4283	2877
70°	14443	3107	2289
75°	13051	2371	1748
80°	11034	1605	1173
85°	7698	735	567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18612 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	2.8
10°-20°	360.5	7.7
20°-30°	506.2	10.8
30°-40°	551.8	11.7
40°-50°	507.1	10.8
50°-60°	398.3	8.5
60°-70°	259.2	5.5
70°-80°	133.5	2.8
80°-90°	35.9	0.8
90°-100°	40.3	0.9
100°-110°	128.0	2.7
110°-120°	219.1	4.7
120°-130°	288.1	6.1
130°-140°	323.4	6.9
140°-150°	317.1	6.7
150°-160°	266.0	5.7
160°-170°	176.4	3.8
170°-180°	61.7	1.3
0°-30°	998.1	21.2
0°-40°	1549.8	32.9
0°-60°	2455.2	52.2
0°-90°	2883.9	61.3
90°-120°	387.4	8.2
90°-150°	1316.0	28.0
90°-180°	1820.0	38.7
0°-180°	4704.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1401	1395	1378	1390	1386	133
15°	1333	1319	1276	1252	1239	376
25°	1210	1169	1086	1034	1014	556
35°	1042	978	866	786	758	652
45°	852	767	634	544	514	658
55°	648	549	412	336	312	579
65°	438	335	221	178	174	434
75°	233	145	102	93	91	247
85°	54	28	24	24	24	63
90°	0	7	19	18	19	5
95°	29	34	35	35	34	32
105°	118	120	121	122	122	125
115°	220	223	222	221	220	217
125°	320	325	323	321	321	286
135°	414	420	421	420	419	320
145°	502	506	509	510	508	314
155°	574	576	577	580	578	264
165°	625	624	624	628	625	176
175°	650	648	647	651	648	62
180°	651	651	651	651	651	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1401.3	1401.3	1401.3	1401.3	1401.3
2.5°	1407.7	1401.3	1387.4	1400.1	1397.5
5°	1401.3	1395.0	1378.5	1389.9	1386.1
7.5°	1389.9	1382.3	1364.5	1369.6	1363.3
10°	1374.7	1365.8	1340.5	1336.6	1329.0
12.5°	1355.7	1344.3	1310.0	1302.4	1288.5
15°	1332.8	1318.9	1275.8	1251.7	1239.0
17.5°	1306.2	1285.9	1232.7	1204.8	1184.5
20°	1275.8	1250.4	1187.0	1155.3	1127.4
22.5°	1242.8	1213.6	1140.1	1097.0	1077.9
25°	1209.8	1169.2	1085.5	1033.6	1014.5
27.5°	1170.5	1127.4	1034.8	975.2	946.1
30°	1128.7	1080.5	979.0	914.3	880.1
32.5°	1088.1	1029.8	925.8	849.7	818.0
35°	1042.4	977.8	866.2	786.3	758.4
37.5°	998.0	928.3	810.4	722.9	691.2
40°	951.1	875.0	752.0	662.0	629.0
42.5°	902.9	821.8	693.7	599.8	568.1
45°	852.2	767.2	634.1	544.0	513.6
47.5°	804.0	714.0	577.0	487.0	459.1
50°	750.8	660.7	521.2	433.7	407.1
52.5°	698.8	603.6	468.0	384.3	360.2
55°	648.0	549.1	412.2	336.1	312.0
57.5°	596.0	494.6	362.7	291.7	271.4
60°	542.8	441.3	310.7	246.0	225.7
62.5°	490.8	389.3	266.3	205.4	195.3
65°	437.5	334.8	220.7	177.5	173.7
67.5°	386.8	284.1	177.5	156.0	152.2
70°	333.5	234.6	147.1	134.4	129.4
72.5°	282.8	189.0	123.0	112.9	110.3
75°	233.3	144.6	101.5	92.6	91.3
77.5°	183.9	102.7	79.9	74.8	72.3
80°	138.2	73.6	60.9	55.8	55.8
82.5°	96.4	49.5	41.8	39.3	39.3
85°	54.5	27.9	24.1	24.1	24.1
87.5°	20.3	10.1	10.1	8.9	8.9
90°	0.5	7.1	19.2	18.1	18.7
92.5°	12.1	16.5	17.0	17.6	17.6
95°	28.6	34.1	35.2	35.2	34.1
97.5°	47.8	52.7	54.9	54.9	54.9
100°	69.8	74.2	75.8	75.8	75.3
102.5°	92.8	96.1	98.3	98.9	98.3
105°	118.1	119.8	120.9	122.0	122.0
107.5°	143.4	145.6	145.6	146.1	143.4
110°	167.6	170.9	170.9	170.9	169.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	193.9	197.2	196.7	195.0	193.9
115°	219.8	223.1	222.0	221.4	219.8
117.5°	245.6	250.0	247.2	245.6	243.9
120°	271.4	275.8	271.4	271.4	269.8
122.5°	295.0	300.5	297.8	296.1	295.0
125°	319.7	324.7	323.0	321.4	320.8
127.5°	343.9	350.0	347.8	345.6	343.9
130°	366.4	373.6	372.5	371.4	369.2
132.5°	391.7	397.2	397.8	395.0	393.4
135°	413.7	419.7	420.8	420.3	418.6
137.5°	437.9	442.8	443.9	443.4	441.2
140°	459.3	464.2	467.0	467.0	464.8
142.5°	481.3	486.2	487.9	488.4	486.2
145°	502.1	506.0	509.3	509.8	507.6
147.5°	520.8	525.8	528.0	529.1	526.9
150°	540.1	543.3	545.5	547.2	545.5
152.5°	557.1	560.4	563.1	565.3	563.1
155°	574.1	575.8	577.4	580.2	578.5
157.5°	588.9	590.0	591.1	595.0	592.2
160°	602.1	603.2	603.8	607.1	604.9
162.5°	614.2	614.2	614.8	618.6	615.9
165°	624.7	624.1	624.1	628.0	625.2
167.5°	634.0	632.3	632.3	636.2	633.4
170°	641.1	639.5	638.9	642.8	639.5
172.5°	646.1	644.4	643.9	647.7	644.4
175°	649.9	648.3	647.2	651.0	647.7
177.5°	652.1	650.5	649.4	652.7	649.4
180°	651.0	651.0	651.0	651.0	651.0

(END OF REPORT)