

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: P1000104

Luminaire Tested: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000104
REPORT IS A COMBINATION OF REPORTS P988663 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B865D330UB27-4F0-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

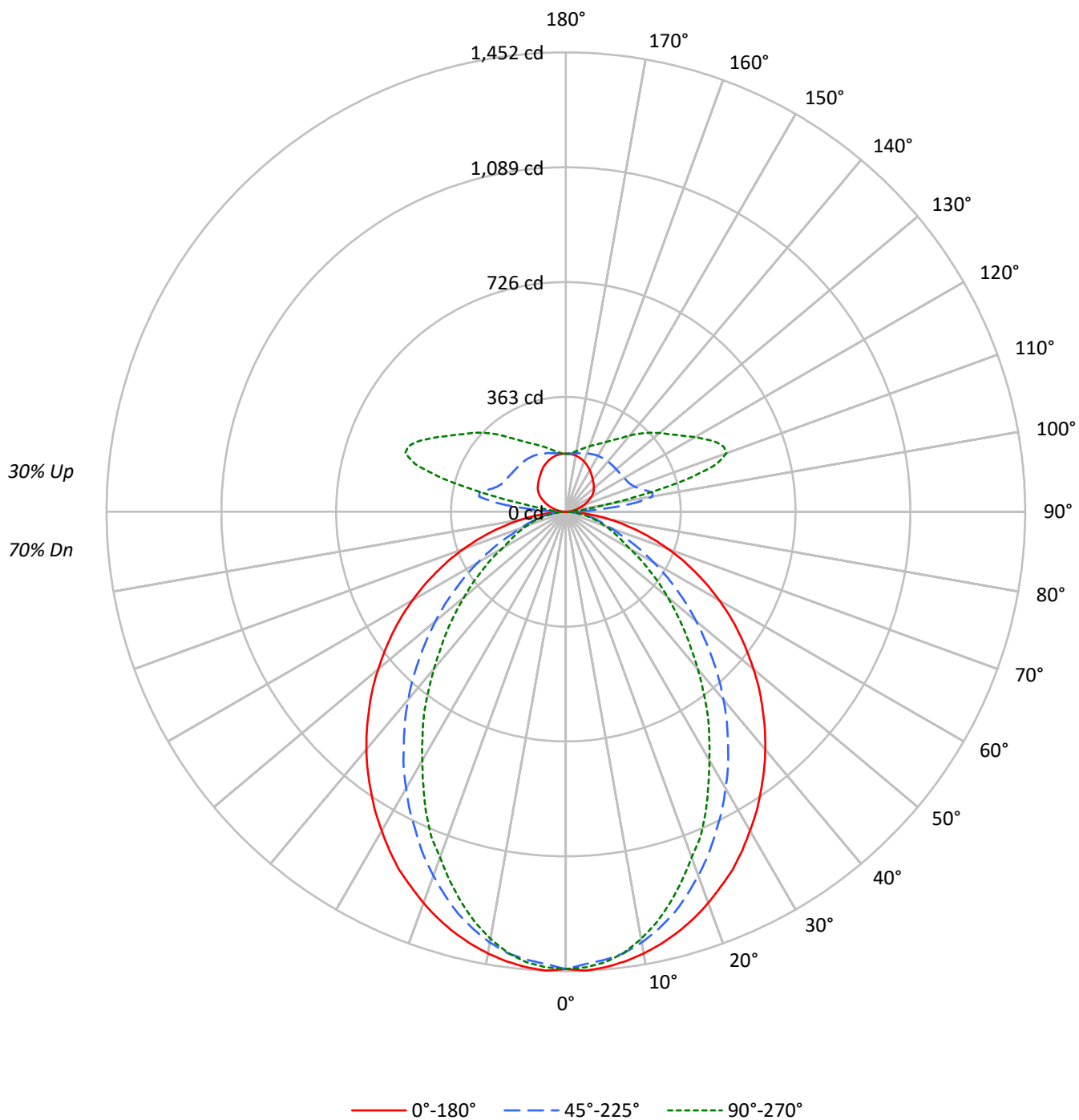
Lumens per Lamp: N/A
Luminaire Lumens: 4250.5 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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

TEST NUMBER: P1000104

CATALOG NUMBER: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1000104

CATALOG NUMBER: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	74	74	74
1	103	99	95	92	97	94	90	87	84	81	79	75	73	71	67	66	64	64	64	60
2	94	87	81	76	89	83	77	73	74	70	67	67	64	61	60	57	55	55	55	52
3	87	77	70	64	82	73	67	62	66	61	57	60	56	52	54	50	48	48	48	44
4	80	69	61	55	75	66	59	53	59	54	49	54	49	45	48	45	42	42	42	39
5	73	62	54	48	69	59	52	46	54	48	43	49	44	40	44	40	37	37	37	34
6	68	56	48	42	64	53	46	41	49	43	38	44	39	35	40	36	33	33	33	30
7	63	51	43	37	60	49	41	36	44	38	34	40	35	32	37	33	29	29	29	27
8	59	46	39	33	56	44	37	32	41	35	30	37	32	29	34	30	27	27	27	25
9	55	43	35	30	52	41	34	29	38	32	28	34	29	26	32	27	24	24	24	22
10	51	39	32	27	49	38	31	27	35	29	25	32	27	24	29	25	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22875	22875	22875
5°	22912	21762	21601
10°	22686	20640	19959
15°	22375	19315	18088
20°	21962	17809	16131
25°	21539	16263	14339
30°	20971	14759	12384
35°	20416	13240	10703
40°	19851	11750	8975
45°	19193	10211	7465
50°	18514	8727	6077
55°	17808	7243	4825
60°	16984	5793	3651
65°	16040	4417	2968
70°	14893	3204	2360
75°	13459	2443	1803
80°	11377	1655	1209
85°	7939	756	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 19193 cd/sqm

TEST NUMBER: P1000104

CATALOG NUMBER: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	3.2
10°-20°	371.8	8.7
20°-30°	522.0	12.3
30°-40°	569.0	13.4
40°-50°	523.0	12.3
50°-60°	410.7	9.7
60°-70°	267.3	6.3
70°-80°	137.6	3.2
80°-90°	36.3	0.9
90°-100°	74.3	1.7
100°-110°	251.1	5.9
110°-120°	263.9	6.2
120°-130°	217.0	5.1
130°-140°	174.4	4.1
140°-150°	131.7	3.1
150°-160°	92.6	2.2
160°-170°	54.5	1.3
170°-180°	17.7	0.4
0°-30°	1029.2	24.2
0°-40°	1598.2	37.6
0°-60°	2531.9	59.6
0°-90°	2973.2	69.9
90°-120°	589.2	13.9
90°-150°	1112.4	26.2
90°-180°	1277.0	30.0
0°-180°	4250.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1445	1438	1422	1433	1429	137
15°	1374	1360	1316	1291	1278	387
25°	1248	1206	1119	1066	1046	574
35°	1075	1008	893	811	782	673
45°	879	791	654	561	530	679
55°	668	566	425	347	322	597
65°	451	345	228	183	179	447
75°	241	149	105	96	94	254
85°	56	29	25	25	25	65
90°	0	5	12	11	12	4
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	

TEST NUMBER: P1000104

CATALOG NUMBER: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.1	1445.1	1445.1	1445.1	1445.1
2.5°	1451.6	1445.1	1430.7	1443.8	1441.2
5°	1445.1	1438.5	1421.5	1433.3	1429.4
7.5°	1433.3	1425.5	1407.2	1412.4	1405.9
10°	1417.6	1408.5	1382.3	1378.4	1370.5
12.5°	1398.0	1386.2	1350.9	1343.1	1328.7
15°	1374.5	1360.1	1315.6	1290.8	1277.7
17.5°	1347.0	1326.1	1271.2	1242.4	1221.5
20°	1315.6	1289.5	1224.1	1191.4	1162.6
22.5°	1281.6	1251.5	1175.7	1131.2	1111.6
25°	1247.6	1205.8	1119.4	1065.8	1046.2
27.5°	1207.1	1162.6	1067.1	1005.7	975.6
30°	1163.9	1114.2	1009.6	942.9	907.6
32.5°	1122.1	1061.9	954.7	876.2	843.5
35°	1075.0	1008.3	893.2	810.8	782.0
37.5°	1029.2	957.3	835.7	745.4	712.7
40°	980.8	902.4	775.5	682.7	648.7
42.5°	931.1	847.4	715.3	618.6	585.9
45°	878.8	791.2	653.9	561.0	529.6
47.5°	829.1	736.3	595.0	502.2	473.4
50°	774.2	681.3	537.5	447.3	419.8
52.5°	720.6	622.5	482.6	396.3	371.4
55°	668.3	566.3	425.0	346.6	321.7
57.5°	614.7	510.0	374.0	300.8	279.9
60°	559.7	455.1	320.4	253.7	232.8
62.5°	506.1	401.5	274.6	211.9	201.4
65°	451.2	345.3	227.6	183.1	179.2
67.5°	398.9	292.9	183.1	160.9	156.9
70°	343.9	241.9	151.7	138.6	133.4
72.5°	291.6	194.9	126.9	116.4	113.8
75°	240.6	149.1	104.6	95.5	94.2
77.5°	189.6	105.9	82.4	77.2	74.5
80°	142.5	75.9	62.8	57.5	57.5
82.5°	99.4	51.0	43.2	40.5	40.5
85°	56.2	28.8	24.8	24.8	24.8
87.5°	20.9	10.5	10.5	9.2	9.2
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

TEST NUMBER: P1000104

CATALOG NUMBER: SA2XXRDIP-B865D330UB27-4F0-XX-W2A-F4

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)