

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: P1025442

Luminaire Tested: S124DIP-B350D810UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025442
REPORT IS A COMBINATION OF REPORTS P995967 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB27-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

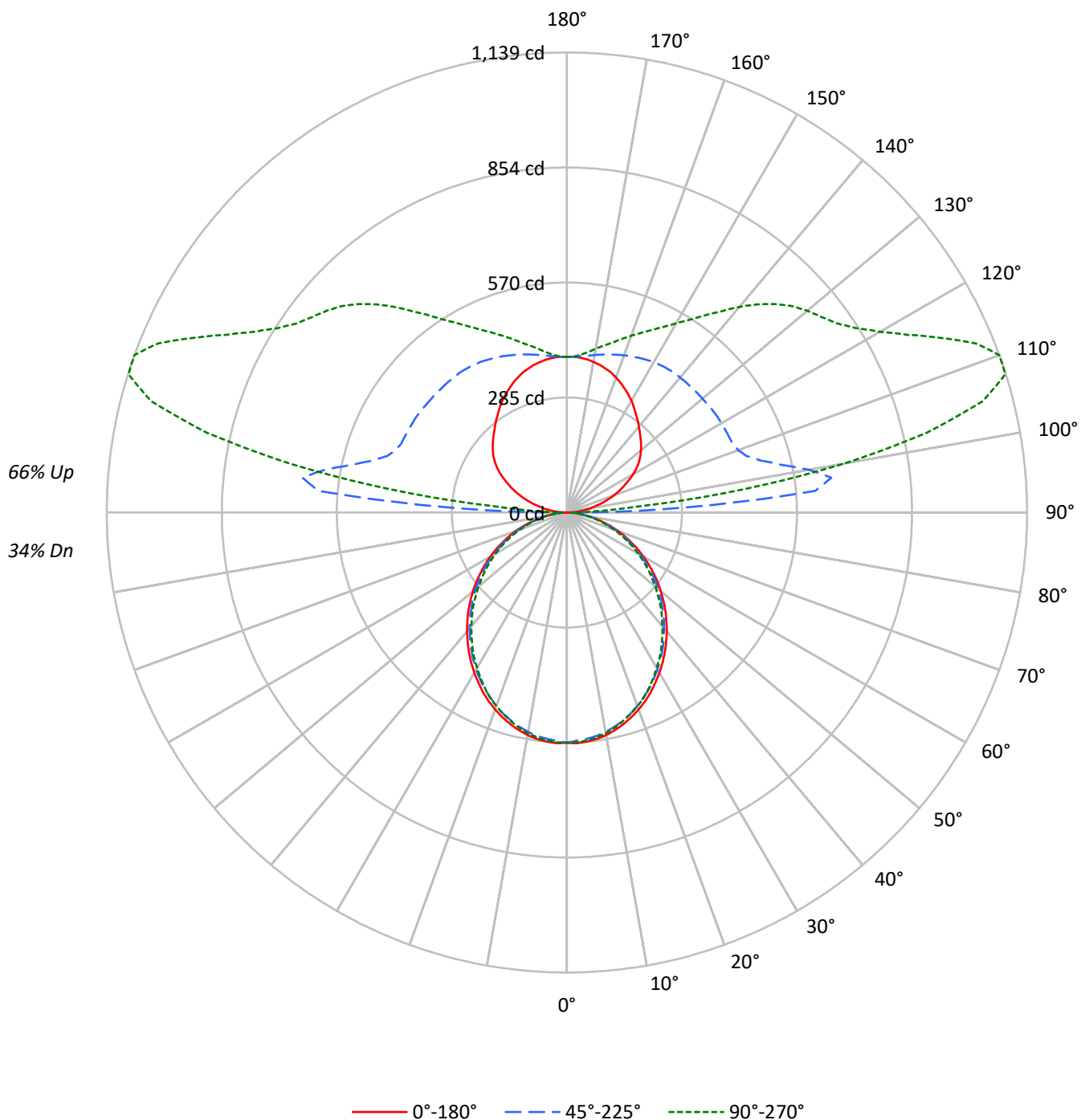
Lumens per Lamp: N/A
Luminaire Lumens: 4276.7 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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

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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	50	44	42	40	32	31	30
3	78	69	62	56	70	63	56	51	50	46	42	39	36	34	29	27	25
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	26	23	22
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	17
7	56	44	36	31	50	40	33	28	32	27	24	26	22	19	19	17	15
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.3
10°-20°	151.4	3.5
20°-30°	222.8	5.2
30°-40°	258.9	6.1
40°-50°	258.9	6.1
50°-60°	226.5	5.3
60°-70°	168.1	3.9
70°-80°	95.4	2.2
80°-90°	28.8	0.7
90°-100°	286.2	6.7
100°-110°	582.2	13.6
110°-120°	518.9	12.1
120°-130°	435.9	10.2
130°-140°	363.7	8.5
140°-150°	277.8	6.5
150°-160°	195.3	4.6
160°-170°	114.8	2.7
170°-180°	37.3	0.9
0°-30°	427.8	10.0
0°-40°	686.8	16.1
0°-60°	1172.2	27.4
0°-90°	1464.5	34.2
90°-120°	1387.3	32.4
90°-150°	2464.7	57.6
90°-180°	2812.0	65.8
0°-180°	4276.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	1	6	14	15	16	3
95°	25	79	617	305	185	27
105°	89	128	497	1069	1065	94
115°	156	196	443	851	1023	155
125°	217	258	441	724	816	194
135°	258	307	437	643	730	200
145°	298	341	434	542	596	187
155°	338	365	422	478	499	156
165°	369	380	405	429	435	104
175°	385	385	388	394	392	37
180°	385	385	385	385	385	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	0.8	6.1	13.6	15.1	15.9
92.5°	10.6	58.3	296.8	98.0	68.9
95°	25.0	78.7	617.0	305.4	184.7
97.5°	41.6	87.1	660.1	623.8	443.6
100°	57.5	98.4	608.7	863.0	694.2
102.5°	72.7	112.0	544.3	1013.0	912.2
105°	88.6	128.3	496.6	1069.3	1065.2
107.5°	106.0	145.0	465.6	1052.3	1137.8
110°	123.4	161.6	451.2	991.8	1139.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	140.1	178.3	444.4	917.6	1094.7
115°	156.0	195.7	442.9	851.0	1022.8
117.5°	172.6	212.0	442.1	798.7	952.4
120°	189.3	227.9	442.1	763.5	894.8
122.5°	204.4	243.4	441.4	740.4	849.4
125°	217.3	258.2	440.6	724.1	816.1
127.5°	229.4	271.8	439.1	708.6	794.9
130°	239.2	285.0	438.3	690.0	776.7
132.5°	249.1	296.4	437.6	668.1	756.3
135°	258.2	307.4	436.8	642.8	729.8
137.5°	267.2	316.8	436.8	615.5	698.7
140°	277.1	325.5	436.1	589.0	664.7
142.5°	287.7	333.5	436.1	564.4	628.3
145°	297.5	340.6	434.5	542.0	595.8
147.5°	308.9	347.5	432.3	523.5	565.5
150°	319.5	353.9	430.0	506.4	540.5
152.5°	329.3	360.0	426.2	492.1	517.8
155°	338.4	365.3	422.4	478.4	498.9
157.5°	347.5	370.2	418.6	465.6	481.5
160°	355.8	374.4	414.1	452.7	465.6
162.5°	363.4	377.8	409.6	440.2	450.4
165°	368.7	380.0	405.0	428.9	435.3
167.5°	374.7	381.9	400.5	419.0	423.2
170°	378.5	383.5	395.9	409.2	411.8
172.5°	382.3	384.6	391.4	400.4	400.5
175°	384.6	385.3	388.4	393.7	392.1
177.5°	386.1	385.3	386.1	388.8	386.1
180°	385.3	385.3	385.3	385.3	385.3

(END OF REPORT)