

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: P1025843

Luminaire Tested: S124DIP-B795D590UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025843
REPORT IS A COMBINATION OF REPORTS P996503 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B795D590UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

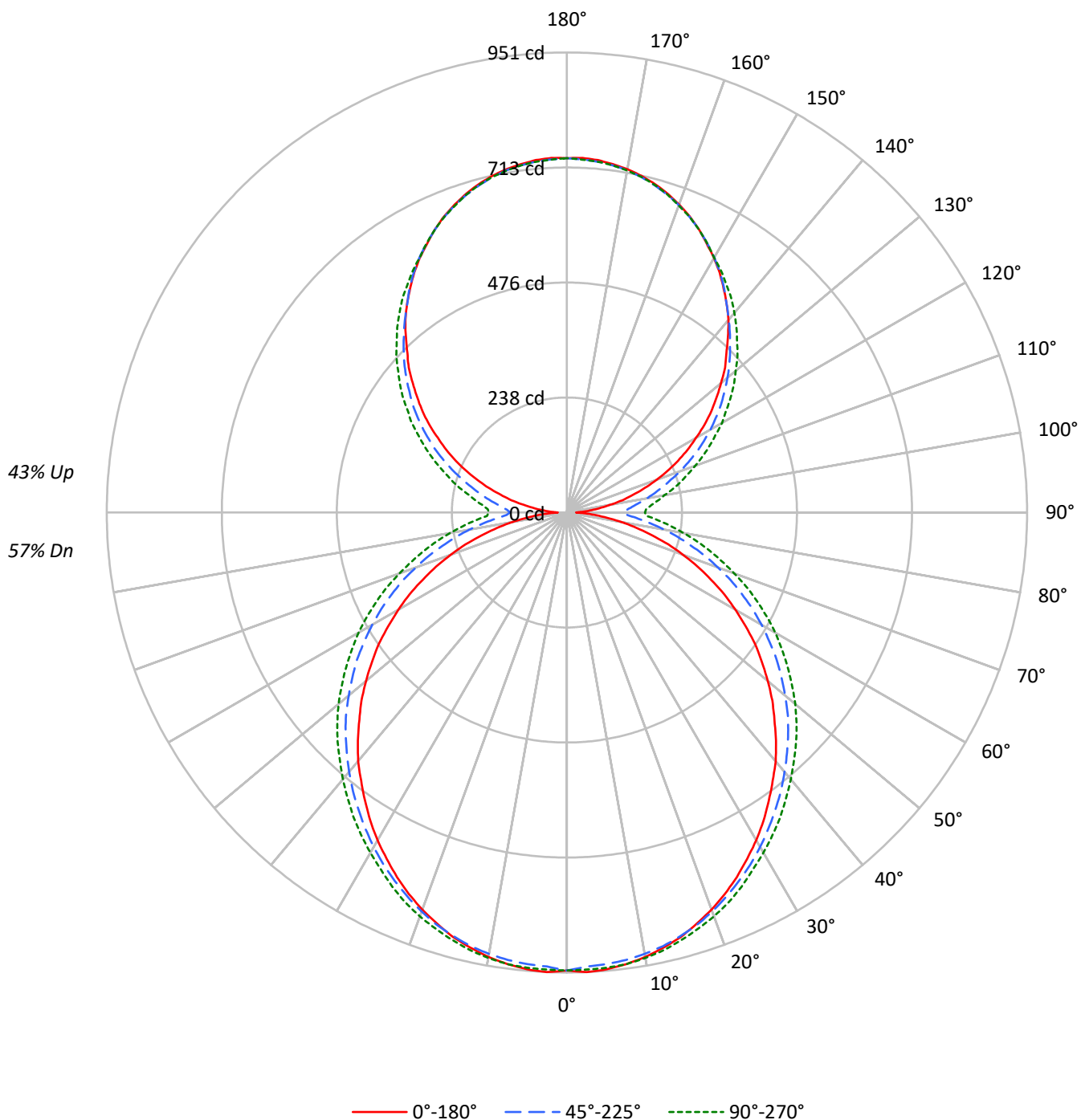
Lumens per Lamp: N/A
Luminaire Lumens: 5262.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.3
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	80	75	72	69	64	61	59	53	52	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	44	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	41	37	35
4	74	62	54	47	68	58	51	45	50	44	40	43	38	35	36	33	30
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	29	26
6	62	50	41	35	58	46	39	33	40	34	29	35	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	27	23	20
8	53	41	32	27	49	38	31	26	33	27	23	29	24	20	24	21	18
9	50	37	29	24	46	35	28	23	30	25	20	26	22	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7721	7721	7721
5°	7742	7519	7533
10°	7692	7371	7350
15°	7619	7205	7144
20°	7513	7025	6944
25°	7393	6827	6729
30°	7263	6630	6508
35°	7116	6428	6313
40°	6997	6236	6110
45°	6824	6054	5931
50°	6674	5848	5741
55°	6520	5650	5523
60°	6281	5403	5319
65°	6020	5136	5071
70°	5700	4833	4786
75°	5256	4494	4514
80°	4754	4149	4230
85°	4090	3803	3999

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.7
10°-20°	257.0	4.9
20°-30°	388.6	7.4
30°-40°	470.2	8.9
40°-50°	497.1	9.4
50°-60°	467.8	8.9
60°-70°	388.2	7.4
70°-80°	272.4	5.2
80°-90°	155.1	2.9
90°-100°	139.2	2.6
100°-110°	210.7	4.0
110°-120°	288.4	5.5
120°-130°	346.0	6.6
130°-140°	370.9	7.0
140°-150°	355.9	6.8
150°-160°	297.5	5.7
160°-170°	197.9	3.8
170°-180°	69.3	1.3
0°-30°	735.4	14.0
0°-40°	1205.6	22.9
0°-60°	2170.4	41.2
0°-90°	2986.1	56.7
90°-120°	638.3	12.1
90°-150°	1711.1	32.5
90°-180°	2276.0	43.3
0°-180°	5262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	948	945	937	946	945	90
15°	909	910	906	916	915	256
25°	831	838	841	852	854	383
35°	727	740	751	766	769	455
45°	606	627	647	665	670	469
55°	475	497	529	550	557	423
65°	329	363	399	425	434	326
75°	182	222	266	296	305	194
85°	56	101	148	180	191	59
90°	19	67	118	152	161	14
95°	48	88	135	166	175	48
105°	142	163	205	233	243	151
115°	253	263	296	318	325	250
125°	364	363	389	408	413	325
135°	466	470	477	493	497	361
145°	565	566	566	572	575	354
155°	646	646	645	648	645	297
165°	703	701	700	704	701	198
175°	731	728	728	732	728	69
180°	732	732	732	732	732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	951.0	947.9	939.4	946.8	945.7
5°	947.9	944.7	937.2	945.7	944.7
7.5°	941.5	939.4	933.0	942.6	941.5
10°	933.0	931.9	926.6	936.2	935.1
12.5°	921.3	921.3	918.2	926.6	926.6
15°	908.6	909.7	906.5	916.0	915.0
17.5°	891.7	894.8	893.8	903.3	902.3
20°	873.6	876.8	877.9	888.5	888.5
22.5°	853.5	857.7	859.9	870.5	872.6
25°	831.2	837.6	840.8	852.4	853.5
27.5°	806.8	816.4	820.6	831.2	832.3
30°	782.5	790.9	798.4	810.0	812.1
32.5°	755.9	766.6	775.0	788.8	790.9
35°	727.3	740.0	750.6	765.5	768.7
37.5°	698.7	713.5	726.3	741.1	744.3
40°	671.1	684.9	699.8	715.7	719.9
42.5°	639.3	655.2	673.3	691.3	694.5
45°	606.5	626.6	646.7	664.8	670.1
47.5°	575.7	595.9	619.2	637.2	643.6
50°	541.8	565.1	588.4	609.6	616.0
52.5°	507.9	531.2	558.7	579.9	586.3
55°	475.0	497.3	529.1	550.3	556.6
57.5°	437.9	465.4	496.2	521.6	526.9
60°	401.8	429.4	464.4	488.8	497.3
62.5°	366.8	397.6	432.6	457.0	465.4
65°	328.7	362.6	398.6	425.2	433.6
67.5°	292.6	328.7	366.8	393.3	401.8
70°	255.5	291.6	331.9	360.5	367.9
72.5°	219.5	256.6	300.0	327.6	336.1
75°	182.4	221.6	266.1	295.8	305.3
77.5°	147.4	188.7	235.4	265.1	275.7
80°	115.6	158.0	204.6	236.4	244.9
82.5°	83.8	128.3	174.9	207.8	217.3
85°	56.2	100.7	148.4	180.2	190.8
87.5°	35.0	78.5	125.1	155.9	165.4
90°	18.7	67.3	117.5	151.6	161.2
92.5°	30.6	75.1	123.5	154.9	164.0
95°	47.8	87.9	135.3	165.7	175.2
97.5°	67.1	102.4	150.3	180.2	189.7
100°	91.0	120.8	167.3	197.0	204.4
102.5°	117.1	140.9	185.8	215.0	224.0
105°	141.5	163.3	204.8	233.0	243.2
107.5°	169.3	187.9	225.6	254.4	261.2
110°	196.6	212.5	249.0	272.3	282.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	224.9	237.6	271.5	294.9	303.3
115°	253.4	262.9	295.7	318.5	325.3
117.5°	281.2	287.5	318.7	339.3	346.1
120°	307.8	313.3	342.3	360.7	370.3
122.5°	336.7	337.3	365.3	384.8	389.5
125°	363.9	362.9	388.9	407.8	413.1
127.5°	389.4	390.1	410.2	428.2	435.0
130°	415.6	416.2	433.2	451.2	455.2
132.5°	443.4	443.4	455.5	472.5	478.3
135°	466.1	469.5	476.9	492.7	497.4
137.5°	492.7	493.4	498.7	512.9	518.8
140°	519.3	519.5	520.5	533.7	538.4
142.5°	542.7	543.8	542.2	553.9	558.1
145°	564.8	565.9	566.5	572.3	574.9
147.5°	587.4	589.2	588.6	589.1	592.8
150°	607.8	609.0	609.0	609.0	608.4
152.5°	626.0	627.1	627.7	629.4	627.7
155°	645.8	645.8	645.3	647.5	645.3
157.5°	662.8	661.7	661.7	663.4	661.7
160°	677.6	677.0	676.4	678.1	675.3
162.5°	691.2	689.5	688.9	692.3	689.5
165°	703.0	701.3	700.2	703.6	701.3
167.5°	712.7	710.4	710.4	713.8	710.4
170°	720.6	717.8	718.3	721.7	717.8
172.5°	726.3	724.0	724.0	728.0	724.0
175°	731.4	728.5	728.0	731.9	728.0
177.5°	733.6	730.8	730.8	734.8	730.2
180°	732.5	732.5	732.5	732.5	732.5

(END OF REPORT)