

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: P1033710

Luminaire Tested: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033710
REPORT IS A COMBINATION OF REPORTS P998009 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1340UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

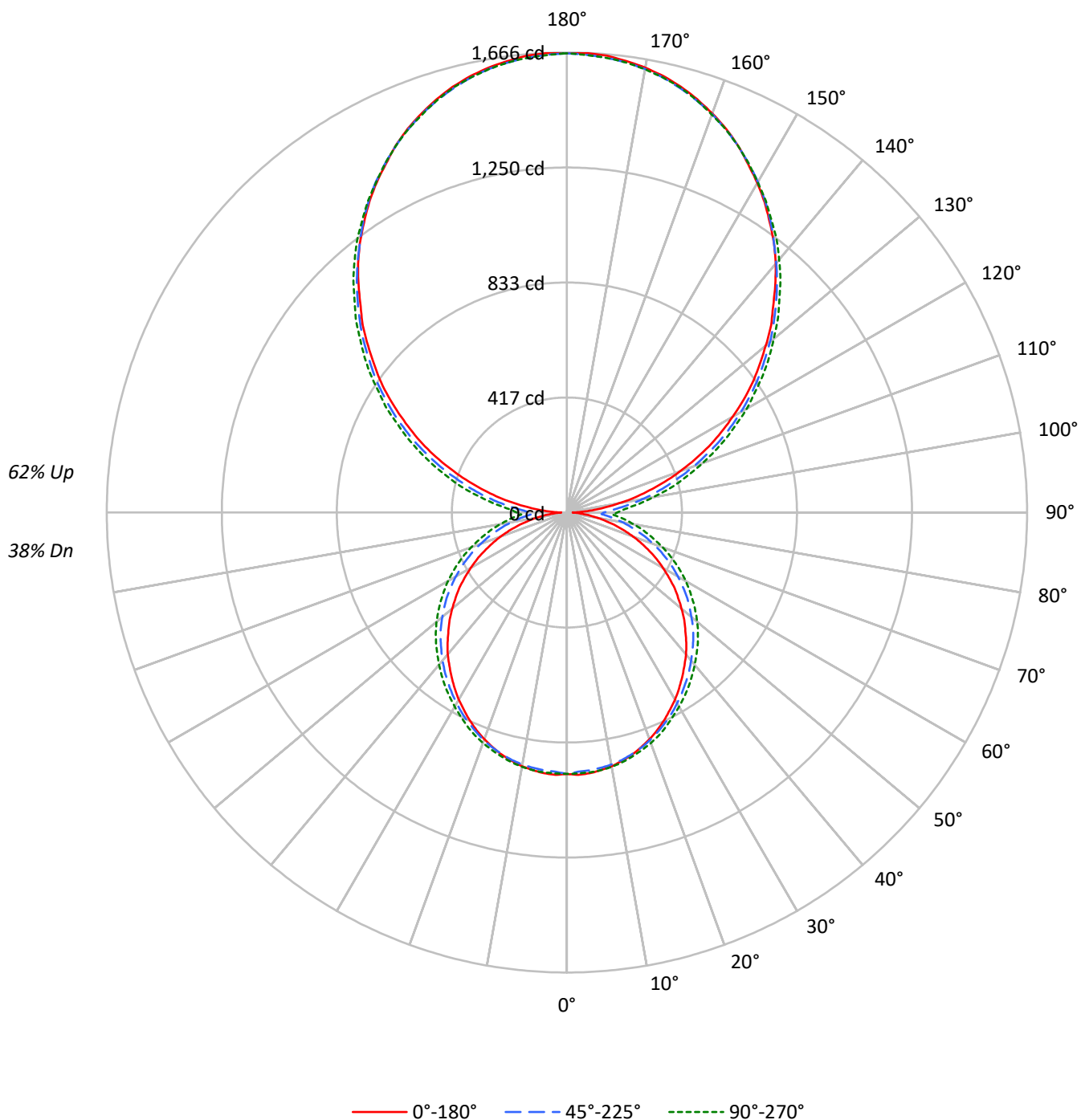
Lumens per Lamp: N/A
Luminaire Lumens: 7846.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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: P1033710

CATALOG NUMBER: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1033710

CATALOG NUMBER: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	94	90	86	82	85	81	78	75	66	64	61	52	50	49	39	38	37
2	86	78	72	66	77	71	65	61	57	53	50	45	42	40	34	32	30
3	78	68	61	55	70	62	55	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	23	21	19
6	60	48	40	34	54	43	36	31	36	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	27	23	25	22	19	19	16	14
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	18	15	13
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	14	11
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10

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

TEST NUMBER: P1033710

CATALOG NUMBER: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	1.1
10°-20°	257.0	3.3
20°-30°	388.6	5.0
30°-40°	470.2	6.0
40°-50°	497.1	6.3
50°-60°	467.8	6.0
60°-70°	388.2	4.9
70°-80°	272.4	3.5
80°-90°	157.1	2.0
90°-100°	199.8	2.5
100°-110°	392.4	5.0
110°-120°	597.0	7.6
120°-130°	753.0	9.6
130°-140°	828.1	10.6
140°-150°	805.3	10.3
150°-160°	675.4	8.6
160°-170°	449.4	5.7
170°-180°	157.4	2.0
0°-30°	735.4	9.4
0°-40°	1205.6	15.4
0°-60°	2170.4	27.7
0°-90°	2988.1	38.1
90°-120°	1189.3	15.2
90°-150°	3575.7	45.6
90°-180°	4858.0	61.9
0°-180°	7846.0	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°	21	77	133	172	183	17
95°	91	138	190	222	232	95
105°	309	332	376	406	419	329
115°	567	577	608	630	636	560
125°	821	820	845	863	866	732
135°	1056	1063	1071	1085	1088	817
145°	1281	1285	1286	1291	1292	802
155°	1466	1466	1465	1470	1465	675
165°	1596	1592	1590	1598	1592	450
175°	1660	1654	1653	1662	1653	158
180°	1663	1663	1663	1663	1663	

TEST NUMBER: P1033710

CATALOG NUMBER: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

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°	20.9	77.4	133.3	171.7	182.8
92.5°	49.3	103.2	155.2	188.8	198.5
95°	91.0	137.5	190.0	222.5	232.0
97.5°	136.2	177.3	231.0	263.7	273.2
100°	191.8	224.4	277.4	308.6	316.0
102.5°	250.9	275.5	326.1	357.5	367.3
105°	309.2	331.7	376.1	406.5	418.8
107.5°	372.2	391.6	430.0	461.6	467.7
110°	435.5	452.9	488.7	510.5	522.9

TEST NUMBER: P1033710

CATALOG NUMBER: S124DIW-B795D1340UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	501.3	514.0	546.4	569.8	578.2
115°	567.2	576.7	608.0	630.1	636.2
117.5°	630.2	636.5	667.0	685.5	690.1
120°	692.1	700.5	727.3	742.1	753.2
122.5°	757.7	759.0	786.3	803.7	804.7
125°	821.0	820.0	845.2	862.7	866.5
127.5°	878.8	881.7	900.3	916.8	923.0
130°	939.6	942.3	959.3	975.9	977.0
132.5°	1002.6	1004.1	1015.5	1031.0	1036.0
135°	1055.5	1063.2	1070.6	1085.1	1087.6
137.5°	1116.0	1118.8	1125.6	1137.6	1144.2
140°	1176.4	1178.0	1179.0	1191.5	1195.5
142.5°	1230.7	1233.3	1230.9	1242.6	1246.8
145°	1280.9	1284.9	1286.2	1291.3	1291.7
147.5°	1332.3	1337.7	1336.4	1336.2	1339.1
150°	1378.6	1382.7	1382.7	1382.7	1381.4
152.5°	1421.3	1423.8	1425.1	1429.0	1425.1
155°	1466.3	1466.3	1465.0	1470.2	1465.0
157.5°	1504.9	1502.3	1502.3	1506.2	1502.3
160°	1538.3	1537.0	1535.7	1539.6	1533.2
162.5°	1569.2	1565.3	1564.0	1571.8	1565.3
165°	1596.2	1592.3	1589.8	1597.5	1592.3
167.5°	1618.1	1612.9	1612.9	1620.6	1612.9
170°	1636.1	1629.6	1630.9	1638.6	1629.6
172.5°	1648.9	1643.8	1643.8	1652.8	1643.8
175°	1660.5	1654.1	1652.8	1661.8	1652.8
177.5°	1665.7	1659.2	1659.2	1668.2	1657.9
180°	1663.1	1663.1	1663.1	1663.1	1663.1

(END OF REPORT)