

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P243457

Luminaire Tested: **S124DR-H1020D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243457
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-84)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-H1020D927-X4F0-XX-UDD-F-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3232.3 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.31' x L: 3.88' x H: 0')
CIE Type: Direct

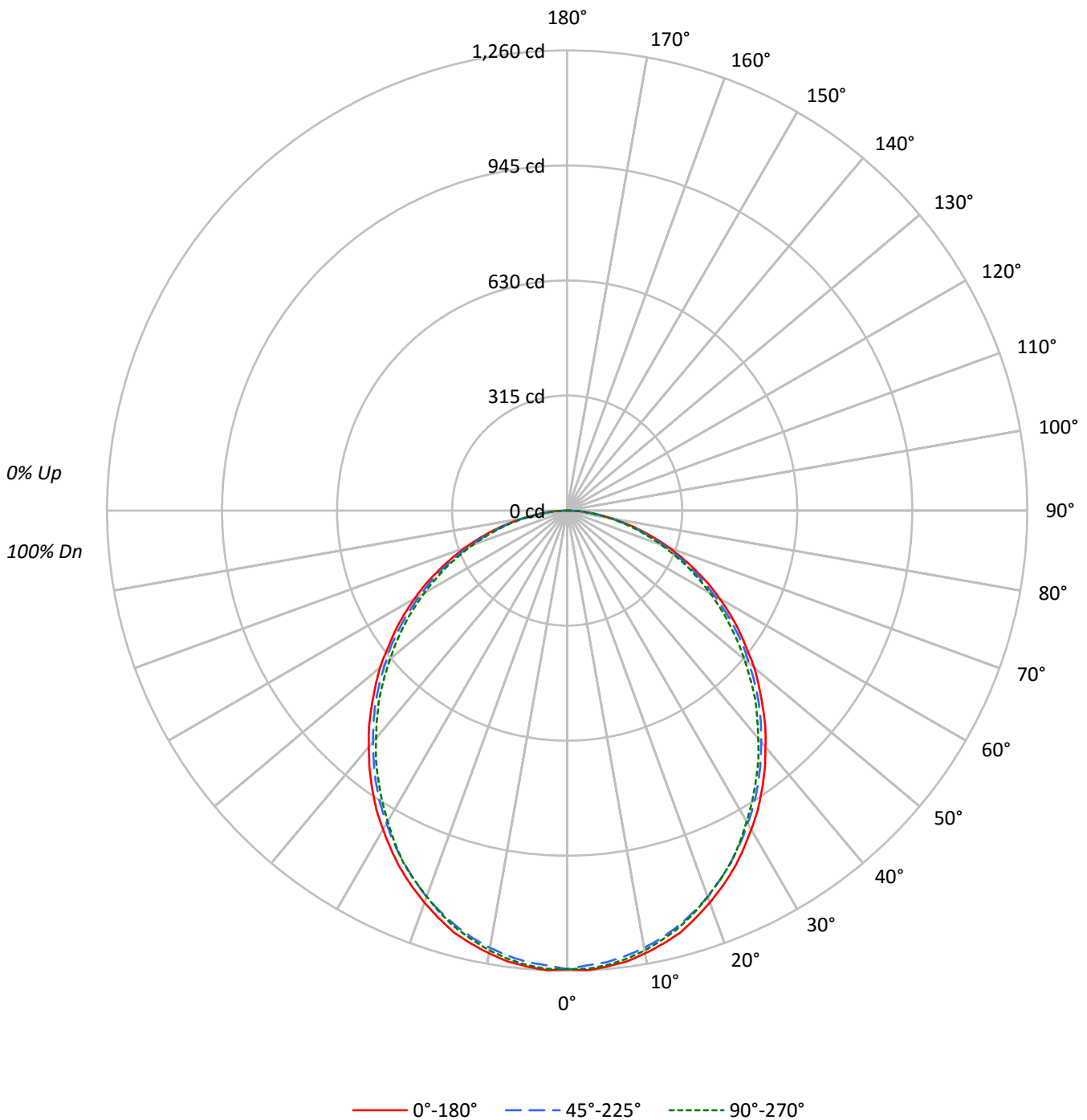
Input Watts (W): 31.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P243457

CATALOG NUMBER: S124DR-H1020D927-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P243457

CATALOG NUMBER: S124DR-H1020D927-X4F0-XX-UDD-F-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11161	11161	11161
5°	11185	11076	11148
10°	11112	10973	11038
15°	11009	10830	10877
20°	10805	10649	10640
25°	10601	10411	10421
30°	10349	10150	10087
35°	10099	9900	9778
40°	9804	9590	9448
45°	9516	9324	9144
50°	9254	8986	8759
55°	8914	8675	8407
60°	8572	8283	8028
65°	8165	7885	7629
70°	7727	7381	7142
75°	7123	6841	6632
80°	6276	6173	6015
85°	5518	5518	5416



TEST NUMBER: P243457

CATALOG NUMBER: S124DR-H1020D927-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.4	3.7
10°-20°	333.7	10.3
20°-30°	491.5	15.2
30°-40°	571.8	17.7
40°-50°	572.1	17.7
50°-60°	500.3	15.5
60°-70°	371.6	11.5
70°-80°	211.7	6.6
80°-90°	61.0	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	943.6	29.2
0°-40°	1515.5	46.9
0°-60°	2588.0	80.1
0°-90°	3232.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1254	1252	1241	1250	1249	119
15°	1196	1190	1177	1184	1182	337
25°	1081	1076	1062	1064	1062	497
35°	931	922	912	904	901	582
45°	757	754	742	730	727	585
55°	575	571	560	548	542	514
65°	388	385	375	367	363	385
75°	207	203	199	195	193	220
85°	54	53	54	52	53	62
90°	0	0	0	0	0	



TEST NUMBER: P243457

CATALOG NUMBER: S124DR-H1020D927-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1255.6	1255.6	1255.6	1255.6	1255.6
2.5°	1259.7	1256.6	1246.4	1256.6	1255.6
5°	1253.5	1251.5	1241.3	1250.5	1249.4
7.5°	1245.4	1241.3	1230.0	1239.2	1238.2
10°	1231.1	1228.0	1215.7	1224.9	1222.9
12.5°	1214.7	1211.6	1198.4	1205.5	1203.5
15°	1196.3	1190.2	1176.9	1184.1	1182.0
17.5°	1169.8	1165.7	1152.4	1158.5	1155.5
20°	1142.2	1137.1	1125.8	1126.8	1124.8
22.5°	1112.5	1107.4	1094.2	1098.2	1094.2
25°	1080.9	1075.8	1061.5	1064.5	1062.5
27.5°	1045.1	1040.0	1026.7	1027.8	1023.7
30°	1008.3	1002.2	988.9	987.9	982.8
32.5°	971.6	965.4	952.2	948.1	943.0
35°	930.7	922.5	912.3	904.1	901.1
37.5°	888.8	884.7	869.4	864.3	860.2
40°	844.9	840.8	826.5	819.3	814.2
42.5°	803.0	797.9	784.6	774.4	770.3
45°	757.0	754.0	741.7	730.5	727.4
47.5°	712.1	711.0	695.7	684.5	679.4
50°	669.2	663.0	649.8	639.5	633.4
52.5°	619.1	618.1	606.8	593.6	588.5
55°	575.2	571.1	559.8	547.6	542.5
57.5°	529.2	527.2	512.9	502.6	497.5
60°	482.2	478.1	465.9	456.7	451.6
62.5°	437.3	432.1	420.9	411.7	406.6
65°	388.2	385.2	374.9	366.8	362.7
67.5°	342.2	338.2	327.9	320.8	316.7
70°	297.3	291.2	284.0	277.9	274.8
72.5°	252.3	247.2	241.1	237.0	232.9
75°	207.4	203.3	199.2	195.1	193.1
77.5°	164.5	160.4	158.4	157.3	155.3
80°	122.6	120.6	120.6	119.5	117.5
82.5°	86.8	84.8	84.8	84.8	83.8
85°	54.1	53.1	54.1	52.1	53.1
87.5°	25.5	25.5	26.6	25.5	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)