

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: P242942

Luminaire Tested: **S121DR-H1025D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-47)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121DR-H1025D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 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: 3050.2 lumens
Efficiency: N/A
Efficacy: 80.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

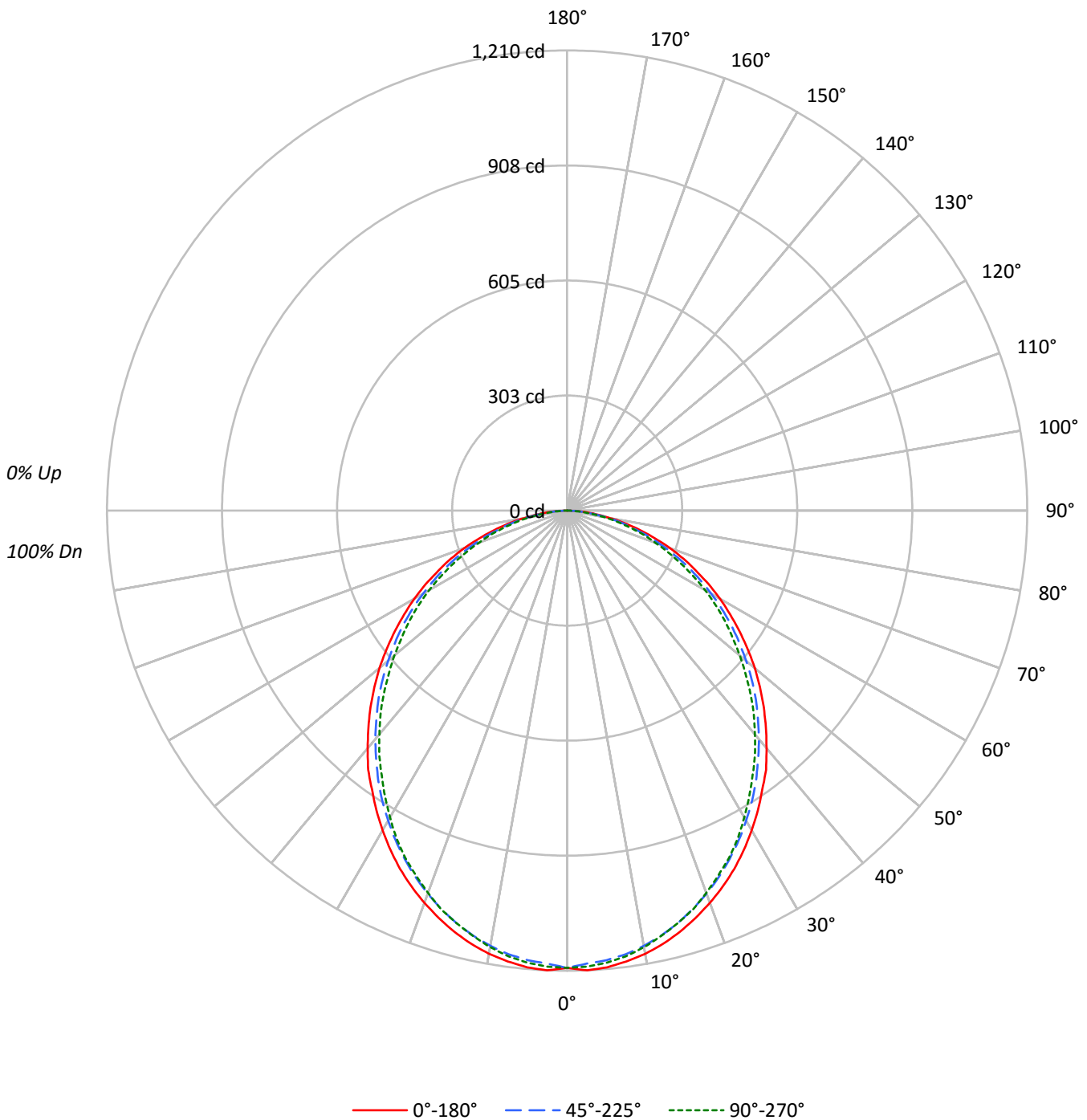
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P242942

CATALOG NUMBER: S121DR-H1025D927-X4F0-XX-UDD-F-W

Luminous Intensity Polar Plot





TEST NUMBER: P242942

CATALOG NUMBER: S121DR-H1025D927-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	97	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76		83	78	75		80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48		59	52	47		57	51	47	45
6	71	58	49	43	69	57	49	42	55	48	42		53	47	42		52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37		49	42	37		47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35624	35624	35624
5°	35861	35296	35495
10°	35605	34967	35069
15°	35172	34454	34454
20°	34609	33802	33729
25°	33987	33043	32931
30°	33208	32215	31873
35°	32366	31317	30753
40°	31550	30344	29698
45°	30631	29416	28578
50°	29690	28303	27325
55°	28551	27229	26191
60°	27538	25950	24830
65°	26172	24531	23199
70°	24811	22784	21337
75°	22701	20664	19393
80°	19776	18257	16927
85°	17032	14006	11729



TEST NUMBER: P242942

CATALOG NUMBER: S121DR-H1025D927-X4F0-XX-UDD-F-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.7
10°-20°	318.8	10.5
20°-30°	468.7	15.4
30°-40°	543.9	17.8
40°-50°	542.5	17.8
50°-60°	472.2	15.5
60°-70°	347.6	11.4
70°-80°	193.6	6.3
80°-90°	49.8	1.6
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°	900.7	29.5
0°-40°	1444.6	47.4
0°-60°	2459.3	80.6
0°-90°	3050.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3050.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1206	1199	1187	1196	1193	114
15°	1147	1140	1123	1128	1123	323
25°	1040	1027	1011	1011	1007	478
35°	895	884	866	856	850	561
45°	731	719	702	688	682	564
55°	553	543	527	513	507	495
65°	373	366	350	335	331	371
75°	198	189	180	173	169	210
85°	50	47	41	36	34	58
90°	0	0	0	0	0	



TEST NUMBER: P242942

CATALOG NUMBER: S121DR-H1025D927-X4F0-XX-UDD-F-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1202.3	1202.3	1202.3	1202.3	1202.3
2.5°	1210.1	1203.4	1192.3	1202.3	1200.1
5°	1205.7	1199.0	1186.7	1195.6	1193.4
7.5°	1195.6	1190.1	1176.7	1184.5	1182.3
10°	1183.4	1176.7	1162.2	1168.9	1165.6
12.5°	1166.7	1161.1	1144.4	1150.0	1145.5
15°	1146.6	1139.9	1123.2	1127.7	1123.2
17.5°	1123.2	1116.5	1098.7	1102.0	1099.8
20°	1097.6	1088.7	1072.0	1074.2	1069.7
22.5°	1069.7	1059.7	1043.0	1043.0	1038.5
25°	1039.6	1027.4	1010.7	1010.7	1007.3
27.5°	1006.2	995.1	977.2	975.0	971.7
30°	970.6	959.4	941.6	937.1	931.6
32.5°	933.8	921.5	904.8	897.0	891.4
35°	894.8	883.6	865.8	855.8	850.2
37.5°	859.1	843.5	824.6	815.7	811.2
40°	815.7	802.3	784.5	772.2	767.8
42.5°	773.3	761.1	742.1	729.9	726.5
45°	731.0	718.7	702.0	687.5	682.0
47.5°	687.5	675.3	658.6	644.1	636.3
50°	644.1	631.8	614.0	599.5	592.8
52.5°	598.4	589.5	570.5	557.1	548.2
55°	552.7	542.7	527.1	512.6	507.0
57.5°	508.1	499.2	482.5	466.9	463.5
60°	464.7	455.7	437.9	424.5	419.0
62.5°	419.0	410.1	393.3	380.0	374.4
65°	373.3	365.5	349.9	335.4	330.9
67.5°	330.9	320.9	306.4	293.1	287.5
70°	286.4	275.2	263.0	251.8	246.3
72.5°	241.8	232.9	222.9	211.7	209.5
75°	198.3	189.4	180.5	172.7	169.4
77.5°	157.1	150.4	143.7	135.9	133.7
80°	115.9	111.4	107.0	101.4	99.2
82.5°	81.3	78.0	71.3	66.9	64.6
85°	50.1	46.8	41.2	35.7	34.5
87.5°	23.4	18.9	14.5	12.3	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)