

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: P242254

Luminaire Tested: **S122DR-S1005D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242254  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DR-S1005D927-X4F0-XX-UDD-F-W  
Description: DEFINE 2 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3106.5 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

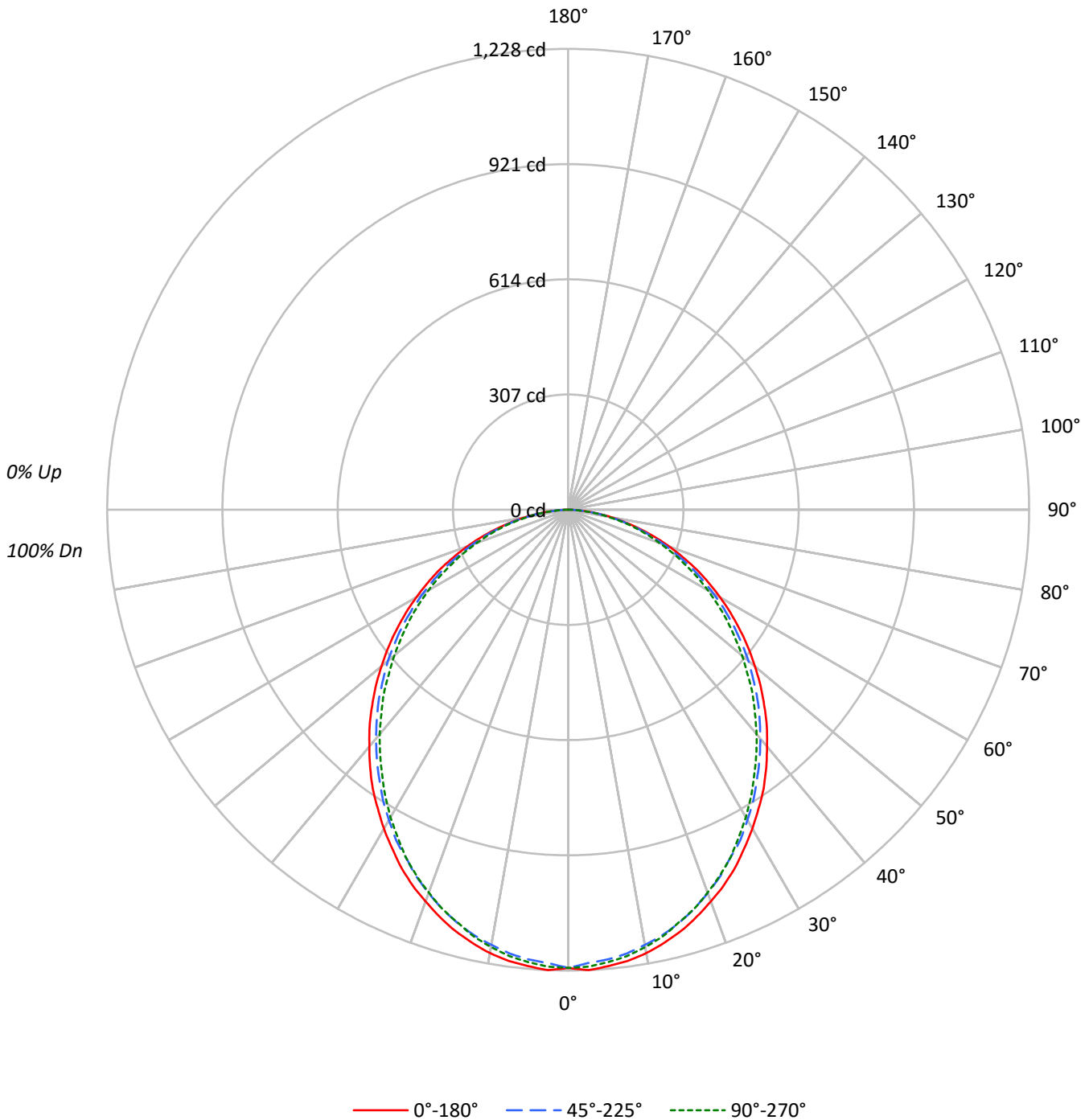
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51					51			
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26					26			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	23257	23257	23257
5°	23346	23010	23145
10°	23208	22777	22891
15°	22920	22480	22459
20°	22514	22038	22013
25°	22110	21492	21492
30°	21588	20994	20813
35°	21104	20393	20093
40°	20494	19793	19415
45°	19893	19198	18724
50°	19241	18580	17916
55°	18560	17856	17195
60°	17802	16994	16370
65°	16987	16140	15401
70°	15956	15104	14385
75°	14513	13909	13564
80°	12878	12494	11847
85°	10512	10009	8982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.9	3.7
10°-20°	323.3	10.4
20°-30°	475.2	15.3
30°-40°	551.9	17.8
40°-50°	551.2	17.7
50°-60°	480.6	15.5
60°-70°	355.3	11.4
70°-80°	201.0	6.5
80°-90°	53.0	1.7
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°	913.4	29.4
0°-40°	1465.3	47.2
0°-60°	2497.2	80.4
0°-90°	3106.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3106.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1221	1221	1221	1221	1221	
5°	1221	1216	1203	1213	1210	116
15°	1162	1155	1140	1145	1139	327
25°	1052	1043	1023	1025	1023	484
35°	908	896	877	870	864	567
45°	738	730	713	700	695	570
55°	559	552	538	524	518	500
65°	377	370	358	348	342	373
75°	197	195	189	182	184	210
85°	48	47	46	42	41	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1221.0	1221.0	1221.0	1221.0	1221.0
2.5°	1228.1	1222.2	1209.3	1221.0	1218.7
5°	1221.0	1216.3	1203.4	1212.8	1210.5
7.5°	1212.8	1205.8	1192.9	1202.3	1199.9
10°	1199.9	1191.7	1177.6	1187.0	1183.5
12.5°	1182.3	1175.3	1161.2	1167.0	1164.7
15°	1162.3	1155.3	1140.0	1144.7	1138.9
17.5°	1137.7	1130.6	1115.4	1121.2	1115.4
20°	1110.7	1103.6	1087.2	1090.7	1086.0
22.5°	1083.7	1073.1	1057.8	1057.8	1055.5
25°	1052.0	1042.6	1022.6	1025.0	1022.6
27.5°	1016.8	1008.5	993.3	989.7	983.9
30°	981.5	972.1	954.5	951.0	946.3
32.5°	944.0	936.9	918.1	911.1	906.4
35°	907.6	895.8	877.0	870.0	864.1
37.5°	866.5	855.9	837.1	828.9	823.0
40°	824.2	814.8	796.0	785.5	780.8
42.5°	783.1	773.7	754.9	743.2	736.1
45°	738.5	730.3	712.7	699.8	695.1
47.5°	695.1	686.8	668.0	655.1	648.1
50°	649.3	643.4	627.0	610.5	604.6
52.5°	604.6	596.4	581.2	568.3	560.0
55°	558.9	551.8	537.7	523.6	517.8
57.5°	513.1	507.2	491.9	477.8	473.2
60°	467.3	462.6	446.1	433.2	429.7
62.5°	422.7	414.4	402.7	391.0	386.3
65°	376.9	369.8	358.1	347.5	341.7
67.5°	329.9	324.0	313.5	305.3	300.6
70°	286.5	281.8	271.2	263.0	258.3
72.5°	241.9	237.2	231.3	223.1	219.6
75°	197.2	194.9	189.0	182.0	184.3
77.5°	157.3	152.6	150.3	146.8	143.2
80°	117.4	116.2	113.9	110.4	108.0
82.5°	79.8	79.8	78.7	74.0	74.0
85°	48.1	47.0	45.8	42.3	41.1
87.5°	21.1	18.8	16.4	12.9	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)