

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: P242183

Luminaire Tested: **S121RDR-S685D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-23)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-S685D927-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED 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: 1771.7 lumens
Efficiency: N/A
Efficacy: 67.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 0.92 / 1.09
Luminous Opening: Rectangular (W 0.09' x L: 3.88' x H: 0')
CIE Type: Direct

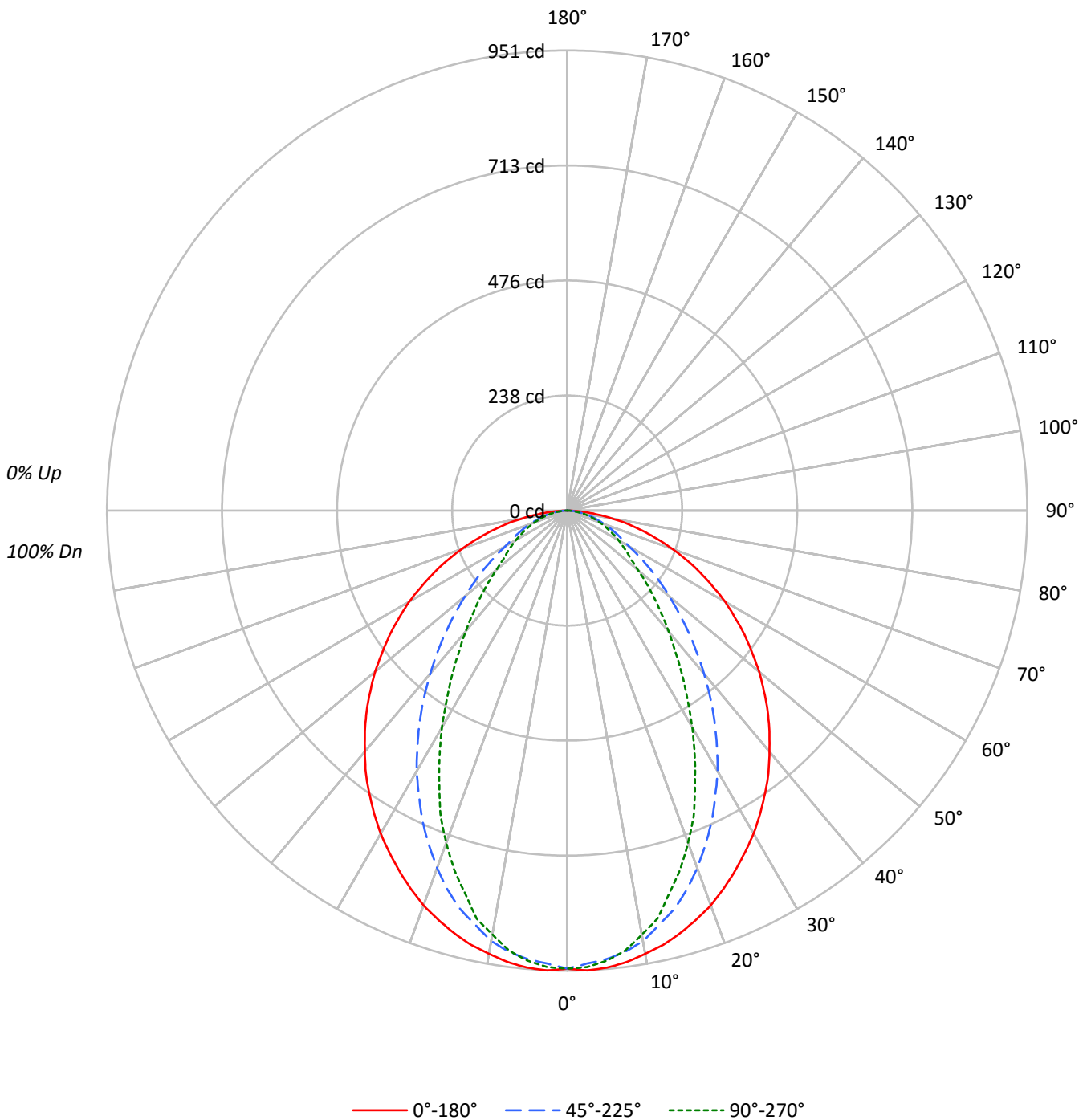
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	100		
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75		
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65	65	65	65	65	65	65		
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57	57	57	57	57	57	57		
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	50	50	50	50	50	50	50		
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45		
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40	40	40	40	40	40	40		
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37	37	37	37		
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33	33	33	33	33	33	33		
10	58	45	38	33	56	45	37	33	44	37	33	43	37	32	42	36	32	31	31	31	31	31	31	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28050	28050	28050
5°	28202	27685	27780
10°	27981	27171	26765
15°	27727	26172	25077
20°	27375	24777	23030
25°	26857	23127	20433
30°	26372	21277	17699
35°	25790	19200	14986
40°	25157	17007	12625
45°	24563	14838	10656
50°	23882	12709	8800
55°	23122	10724	7857
60°	22347	8687	7277
65°	21271	7831	6724
70°	20038	7069	6177
75°	18408	6434	5713
80°	16090	5682	5136
85°	13191	4861	4318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	5.0
10°-20°	241.0	13.6
20°-30°	329.0	18.6
30°-40°	342.0	19.3
40°-50°	298.8	16.9
50°-60°	225.9	12.7
60°-70°	149.2	8.4
70°-80°	76.9	4.3
80°-90°	20.4	1.2
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°	658.6	37.2
0°-40°	1000.6	56.5
0°-60°	1525.2	86.1
0°-90°	1771.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1771.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	948	943	931	938	934	90
15°	904	890	853	831	818	255
25°	822	789	707	649	625	379
35°	713	650	531	444	414	446
45°	586	498	354	275	254	452
55°	448	340	208	158	152	400
65°	303	189	112	98	96	300
75°	161	74	56	52	50	171
85°	39	16	14	14	13	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.7	946.7	946.7	946.7	946.7
2.5°	951.4	946.7	937.2	945.9	944.3
5°	948.2	942.7	930.8	937.9	934.0
7.5°	941.1	934.8	919.7	922.1	917.3
10°	930.0	922.9	903.1	899.1	889.6
12.5°	918.9	907.8	876.9	869.0	863.5
15°	903.9	890.4	853.2	831.0	817.5
17.5°	886.5	868.2	821.5	791.4	777.1
20°	868.2	844.5	785.8	744.7	730.4
22.5°	845.3	817.5	747.0	697.9	683.7
25°	821.5	789.0	707.4	648.8	625.0
27.5°	796.1	756.5	663.1	597.3	571.2
30°	770.8	722.5	621.9	542.6	517.3
32.5°	742.3	688.4	575.9	492.7	462.6
35°	713.0	649.6	530.8	443.6	414.3
37.5°	683.7	613.9	485.6	397.7	366.8
40°	650.4	576.7	439.7	349.4	326.4
42.5°	618.7	537.9	396.1	312.1	287.6
45°	586.2	498.3	354.1	274.9	254.3
47.5°	551.4	459.5	312.9	242.4	221.8
50°	518.1	418.3	275.7	210.7	190.9
52.5°	481.6	379.5	240.8	178.2	167.2
55°	447.6	339.8	207.6	157.6	152.1
57.5°	411.1	301.8	176.7	142.6	136.3
60°	377.1	263.8	146.6	126.7	122.8
62.5°	339.1	227.4	127.5	112.5	108.5
65°	303.4	189.3	111.7	98.2	95.9
67.5°	267.8	156.9	96.6	85.6	83.2
70°	231.3	124.4	81.6	73.7	71.3
72.5°	195.7	95.1	68.1	61.8	60.2
75°	160.8	74.5	56.2	51.5	49.9
77.5°	129.9	57.0	44.4	40.4	39.6
80°	94.3	42.0	33.3	30.9	30.1
82.5°	64.2	28.5	23.8	22.2	20.6
85°	38.8	15.8	14.3	13.5	12.7
87.5°	15.8	7.1	6.3	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)