

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: P242181

Luminaire Tested: **S121RDR-S305D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242181
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-S305D927-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: 773.5 lumens
Efficiency: N/A
Efficacy: 66.7 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

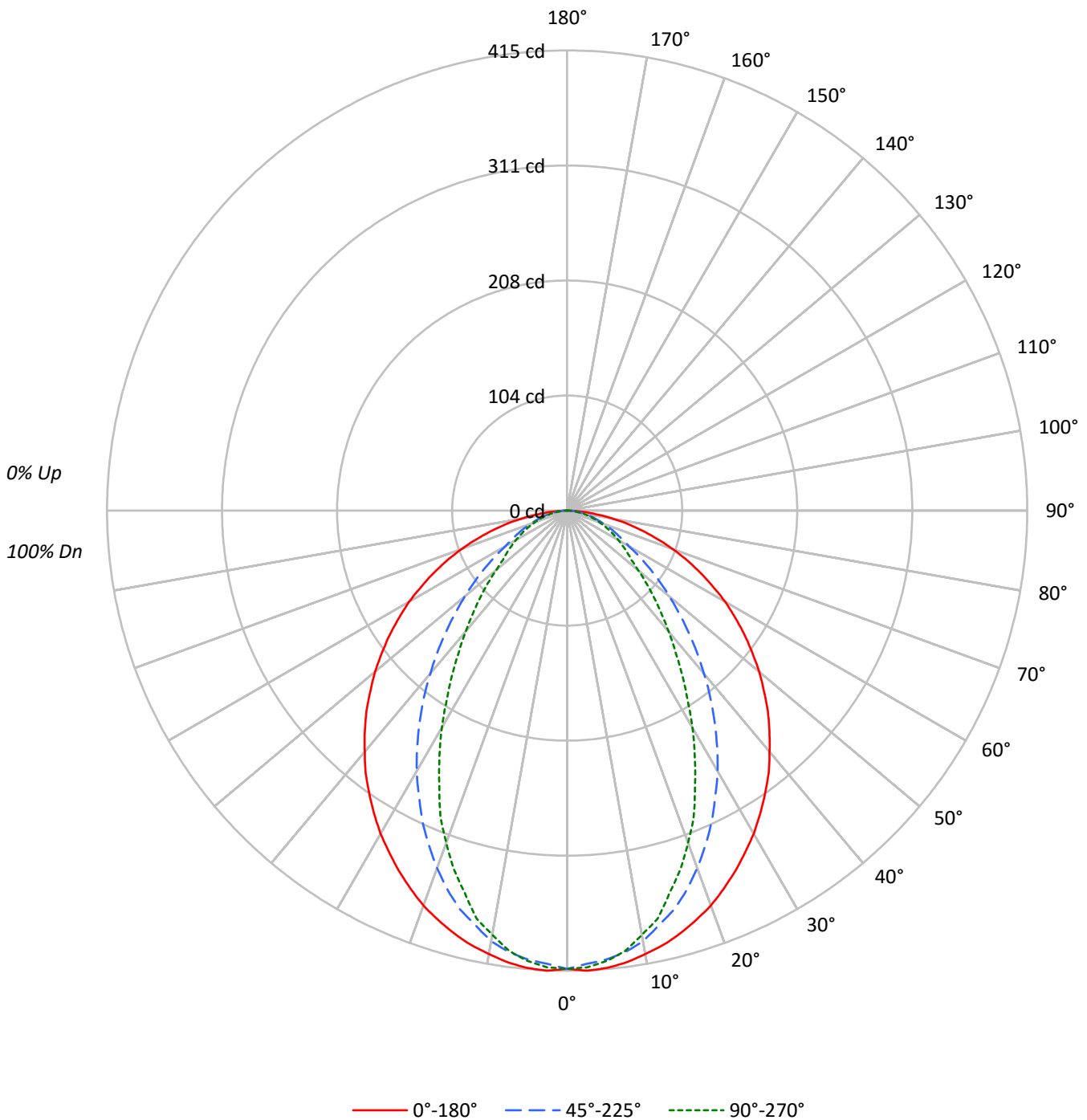
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83	80	77	75
3	94	84	77	71	91	83	76	70	80	74	69		77	72	68		75	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60		70	64	60		68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53		63	57	53		62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48		58	52	47		57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43		53	47	43		52	47	42	40
8	65	53	45	39	64	52	44	39	51	44	39		49	43	39		48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35		46	40	35		45	39	35	33
10	58	45	38	33	56	45	37	33	44	37	33		43	37	32		42	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12246	12246	12246
5°	12314	12088	12129
10°	12218	11863	11686
15°	12107	11426	10951
20°	11954	10818	10055
25°	11727	10099	8922
30°	11513	9289	7729
35°	11260	8381	6543
40°	10985	7426	5512
45°	10727	6478	4651
50°	10427	5550	3844
55°	10094	4680	3430
60°	9754	3793	3176
65°	9290	3421	2938
70°	8750	3084	2694
75°	8037	2816	2496
80°	7030	2474	2235
85°	5745	2108	1870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	5.0
10°-20°	105.2	13.6
20°-30°	143.7	18.6
30°-40°	149.3	19.3
40°-50°	130.4	16.9
50°-60°	98.6	12.7
60°-70°	65.1	8.4
70°-80°	33.6	4.3
80°-90°	8.9	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°	287.6	37.2
0°-40°	436.9	56.5
0°-60°	665.9	86.1
0°-90°	773.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	773.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	406	410	408	39
15°	395	389	372	363	357	111
25°	359	344	309	283	273	165
35°	311	284	232	194	181	195
45°	256	218	155	120	111	197
55°	195	148	91	69	66	175
65°	132	83	49	43	42	131
75°	70	32	25	22	22	75
85°	17	7	6	6	6	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.4	413.3	409.2	413.0	412.3
5°	414.0	411.6	406.4	409.5	407.8
7.5°	410.9	408.1	401.6	402.6	400.5
10°	406.1	403.0	394.3	392.6	388.4
12.5°	401.2	396.4	382.9	379.4	377.0
15°	394.7	388.8	372.5	362.8	357.0
17.5°	387.0	379.1	358.7	345.5	339.3
20°	379.1	368.7	343.1	325.1	318.9
22.5°	369.1	357.0	326.2	304.7	298.5
25°	358.7	344.5	308.9	283.3	272.9
27.5°	347.6	330.3	289.5	260.8	249.4
30°	336.5	315.4	271.5	236.9	225.9
32.5°	324.1	300.6	251.5	215.1	202.0
35°	311.3	283.6	231.7	193.7	180.9
37.5°	298.5	268.1	212.0	173.6	160.1
40°	284.0	251.8	192.0	152.5	142.5
42.5°	270.1	234.9	172.9	136.3	125.6
45°	256.0	217.6	154.6	120.0	111.0
47.5°	240.7	200.6	136.6	105.8	96.8
50°	226.2	182.6	120.4	92.0	83.4
52.5°	210.3	165.7	105.1	77.8	73.0
55°	195.4	148.4	90.6	68.8	66.4
57.5°	179.5	131.8	77.1	62.3	59.5
60°	164.6	115.2	64.0	55.3	53.6
62.5°	148.0	99.3	55.7	49.1	47.4
65°	132.5	82.7	48.8	42.9	41.9
67.5°	116.9	68.5	42.2	37.4	36.3
70°	101.0	54.3	35.6	32.2	31.1
72.5°	85.4	41.5	29.7	27.0	26.3
75°	70.2	32.5	24.6	22.5	21.8
77.5°	56.7	24.9	19.4	17.6	17.3
80°	41.2	18.3	14.5	13.5	13.1
82.5°	28.0	12.5	10.4	9.7	9.0
85°	16.9	6.9	6.2	5.9	5.5
87.5°	6.9	3.1	2.8	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)