

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: P242200

Luminaire Tested: **S121RDR-S305D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242200
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-S305D930-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 796.1 lumens
Efficiency: N/A
Efficacy: 68.6 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

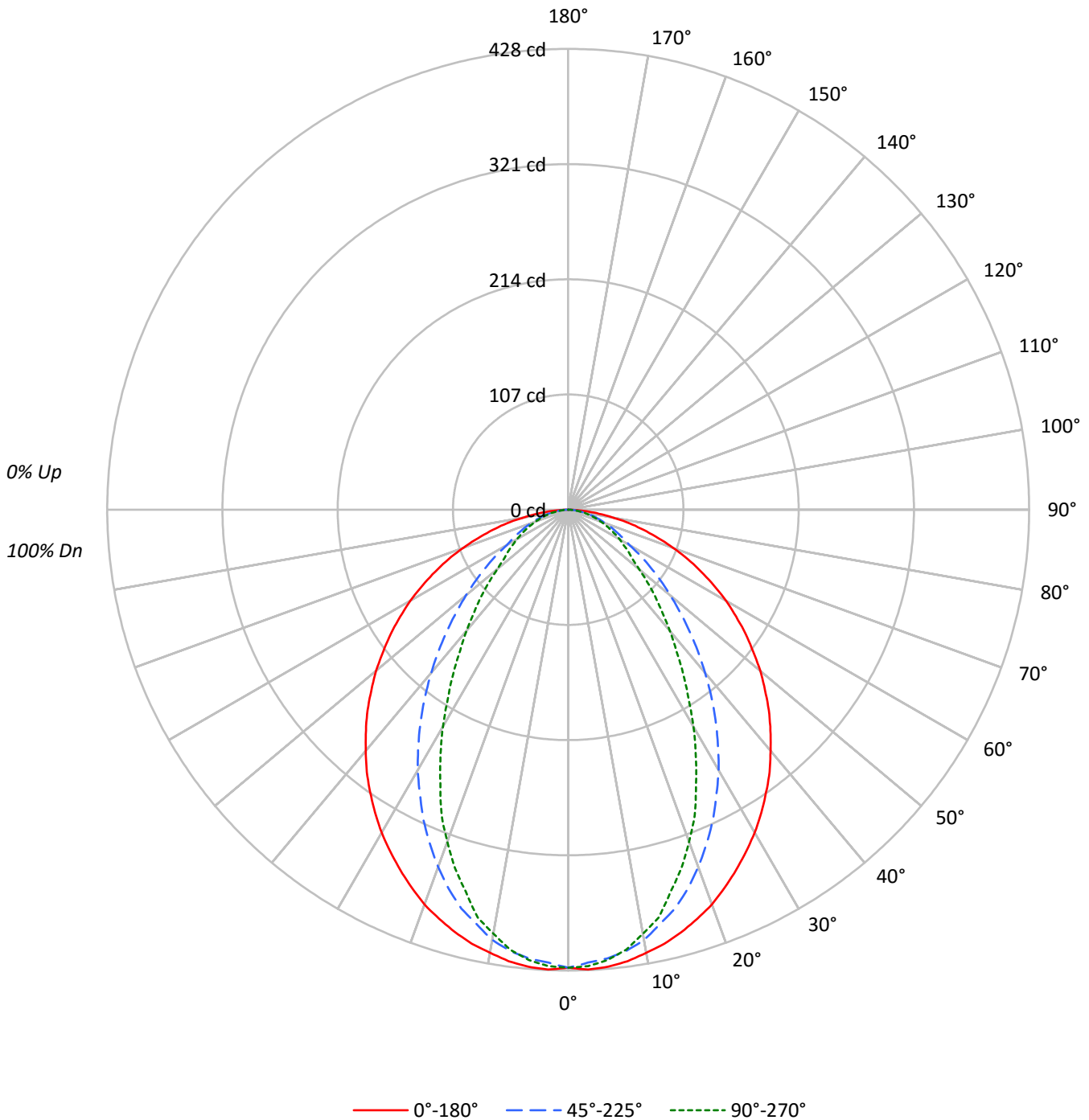
Input Watts (W): 11.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12604	12604	12604
5°	12673	12441	12483
10°	12573	12209	12029
15°	12460	11761	11270
20°	12304	11134	10349
25°	12067	10393	9183
30°	11852	9559	7955
35°	11589	8627	6735
40°	11306	7643	5674
45°	11037	6667	4789
50°	10731	5711	3955
55°	10388	4820	3528
60°	10039	3905	3271
65°	9556	3520	3022
70°	9001	3179	2772
75°	8277	2896	2564
80°	7235	2559	2304
85°	5915	2176	1938



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	5.0
10°-20°	108.3	13.6
20°-30°	147.8	18.6
30°-40°	153.7	19.3
40°-50°	134.3	16.9
50°-60°	101.5	12.7
60°-70°	67.0	8.4
70°-80°	34.6	4.3
80°-90°	9.2	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°	296.0	37.2
0°-40°	449.6	56.5
0°-60°	685.4	86.1
0°-90°	796.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	796.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	425	425	425	425	425	
5°	426	424	418	422	420	40
15°	406	400	383	373	367	114
25°	369	355	318	292	281	170
35°	320	292	238	199	186	200
45°	263	224	159	124	114	203
55°	201	153	93	71	68	180
65°	136	85	50	44	43	135
75°	72	34	25	23	22	77
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°	425.4	425.4	425.4	425.4	425.4
2.5°	427.5	425.4	421.1	425.0	424.3
5°	426.1	423.6	418.3	421.5	419.7
7.5°	422.9	420.1	413.3	414.4	412.2
10°	417.9	414.7	405.8	404.0	399.8
12.5°	412.9	408.0	394.1	390.5	388.0
15°	406.2	400.1	383.4	373.4	367.4
17.5°	398.3	390.2	369.1	355.6	349.2
20°	390.2	379.5	353.1	334.6	328.2
22.5°	379.8	367.4	335.7	313.6	307.2
25°	369.1	354.6	317.9	291.5	280.9
27.5°	357.8	340.0	298.0	268.4	256.7
30°	346.4	324.7	279.4	243.8	232.5
32.5°	333.6	309.3	258.8	221.4	207.9
35°	320.4	291.9	238.5	199.3	186.2
37.5°	307.2	275.9	218.2	178.7	164.8
40°	292.3	259.2	197.6	157.0	146.7
42.5°	278.0	241.7	178.0	140.3	129.2
45°	263.4	223.9	159.1	123.5	114.3
47.5°	247.8	206.5	140.6	108.9	99.7
50°	232.8	188.0	123.9	94.7	85.8
52.5°	216.4	170.5	108.2	80.1	75.1
55°	201.1	152.7	93.3	70.8	68.3
57.5°	184.8	135.6	79.4	64.1	61.2
60°	169.4	118.5	65.9	57.0	55.2
62.5°	152.4	102.2	57.3	50.5	48.8
65°	136.3	85.1	50.2	44.1	43.1
67.5°	120.3	70.5	43.4	38.4	37.4
70°	103.9	55.9	36.7	33.1	32.0
72.5°	87.9	42.7	30.6	27.8	27.1
75°	72.3	33.5	25.3	23.1	22.4
77.5°	58.4	25.6	19.9	18.2	17.8
80°	42.4	18.9	15.0	13.9	13.5
82.5°	28.8	12.8	10.7	10.0	9.3
85°	17.4	7.1	6.4	6.1	5.7
87.5°	7.1	3.2	2.8	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)