

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: P243060

Luminaire Tested: **S121RDR-H305D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-62)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S121RDR-H305D930-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 749.0 lumens
Efficiency: N/A
Efficacy: 66.9 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

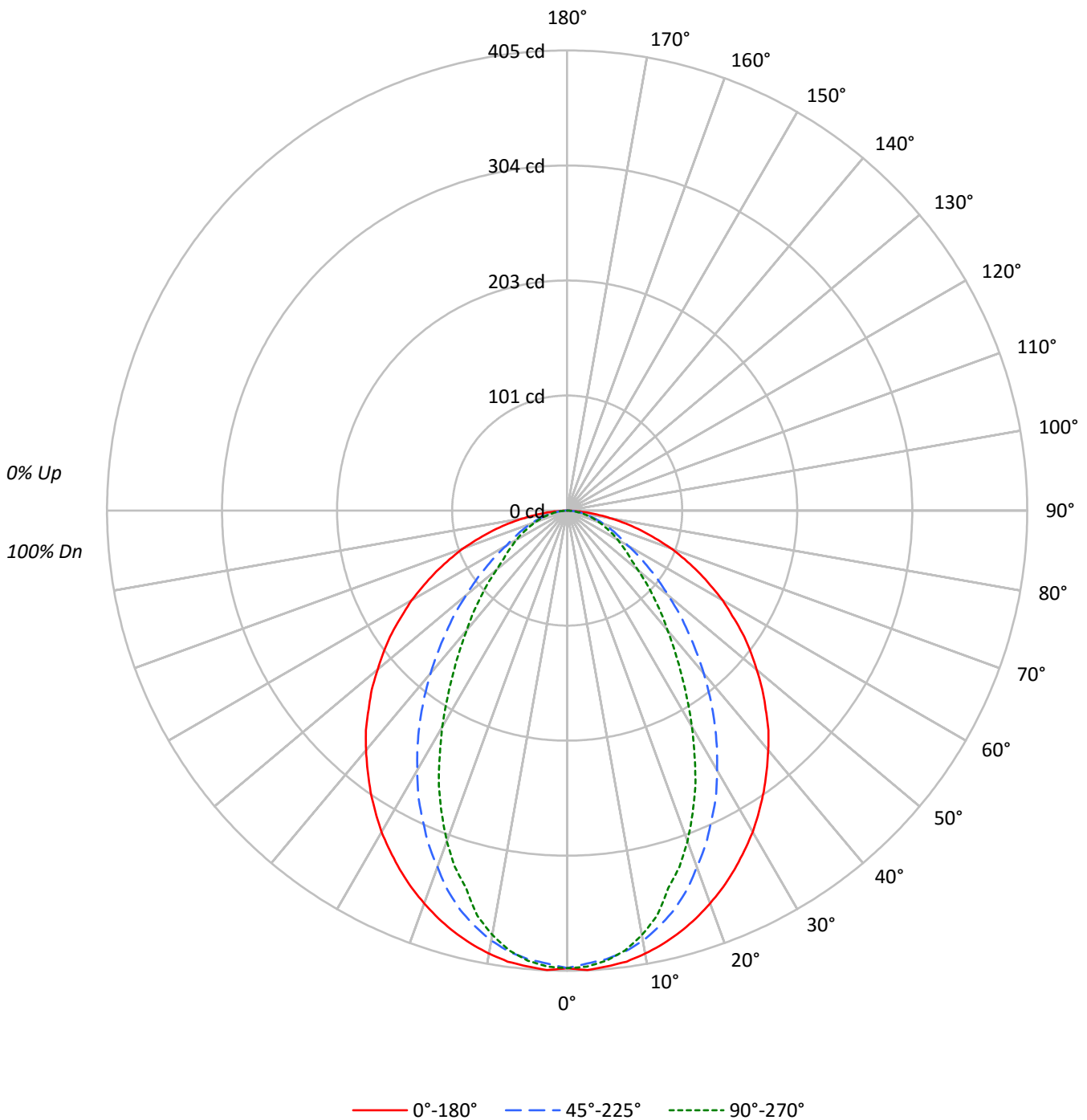
Input Watts (W): 11.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89					87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67					65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59					57				
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52					50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42					41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39					37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35					34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11932	11932	11932
5°	11977	11787	11826
10°	11911	11562	11409
15°	11779	11160	10552
20°	11600	10525	9762
25°	11393	9831	8736
30°	11174	9026	7520
35°	10913	8160	6323
40°	10652	7233	5318
45°	10354	6277	4505
50°	10040	5347	3743
55°	9732	4515	3332
60°	9363	3662	3052
65°	8904	3281	2797
70°	8429	2954	2573
75°	7693	2656	2347
80°	6586	2338	2099
85°	5099	1972	1734



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	5.0
10°-20°	102.5	13.7
20°-30°	139.8	18.7
30°-40°	145.0	19.4
40°-50°	126.5	16.9
50°-60°	95.2	12.7
60°-70°	62.4	8.3
70°-80°	31.8	4.2
80°-90°	8.1	1.1
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°	280.0	37.4
0°-40°	425.0	56.7
0°-60°	646.7	86.3
0°-90°	749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	403	401	396	399	398	38
15°	384	378	364	354	344	108
25°	348	334	301	275	267	161
35°	302	276	226	188	175	189
45°	247	211	150	116	108	191
55°	188	143	87	66	64	168
65°	127	79	47	41	40	126
75°	67	31	23	21	20	71
85°	15	6	6	5	5	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	402.7	402.7	402.7	402.7	402.7
2.5°	404.8	403.1	399.0	402.4	401.7
5°	402.7	400.7	396.3	398.7	397.6
7.5°	400.4	397.6	391.5	392.5	390.5
10°	395.9	392.5	384.3	382.3	379.2
12.5°	390.5	386.7	374.8	370.0	365.2
15°	384.0	378.5	363.8	353.6	344.0
17.5°	376.5	369.6	350.2	335.8	328.7
20°	367.9	359.1	333.8	317.1	309.6
22.5°	358.7	347.5	318.4	297.3	288.4
25°	348.5	334.1	300.7	275.4	267.2
27.5°	337.6	321.2	283.6	254.6	242.7
30°	326.6	306.2	263.8	231.4	219.8
32.5°	314.3	291.1	245.1	209.2	196.3
35°	301.7	275.8	225.6	187.7	174.8
37.5°	288.4	260.4	206.2	167.9	155.3
40°	275.4	243.7	187.0	148.8	137.5
42.5°	262.1	227.0	167.9	132.1	122.5
45°	247.1	211.3	149.8	116.4	107.5
47.5°	233.1	194.2	133.5	102.4	94.2
50°	217.8	177.5	116.0	89.4	81.2
52.5°	203.4	160.4	101.7	75.8	70.7
55°	188.4	143.4	87.4	66.2	64.5
57.5°	172.4	126.6	74.7	59.4	57.3
60°	158.0	110.6	61.8	53.2	51.5
62.5°	142.0	94.5	53.6	47.4	45.7
65°	127.0	79.2	46.8	41.3	39.9
67.5°	111.9	65.2	40.3	35.8	34.5
70°	97.3	51.9	34.1	30.7	29.7
72.5°	81.2	39.3	28.7	25.9	25.3
75°	67.2	30.7	23.2	21.2	20.5
77.5°	52.6	23.2	18.1	16.7	16.4
80°	38.6	16.7	13.7	12.6	12.3
82.5°	26.3	11.3	9.6	8.9	8.5
85°	15.0	6.1	5.8	5.1	5.1
87.5°	5.8	2.4	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)