

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: P243069

Luminaire Tested: **S121RDR-H1025D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243069
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-H1025D935-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2657.7 lumens
Efficiency: N/A
Efficacy: 70.5 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

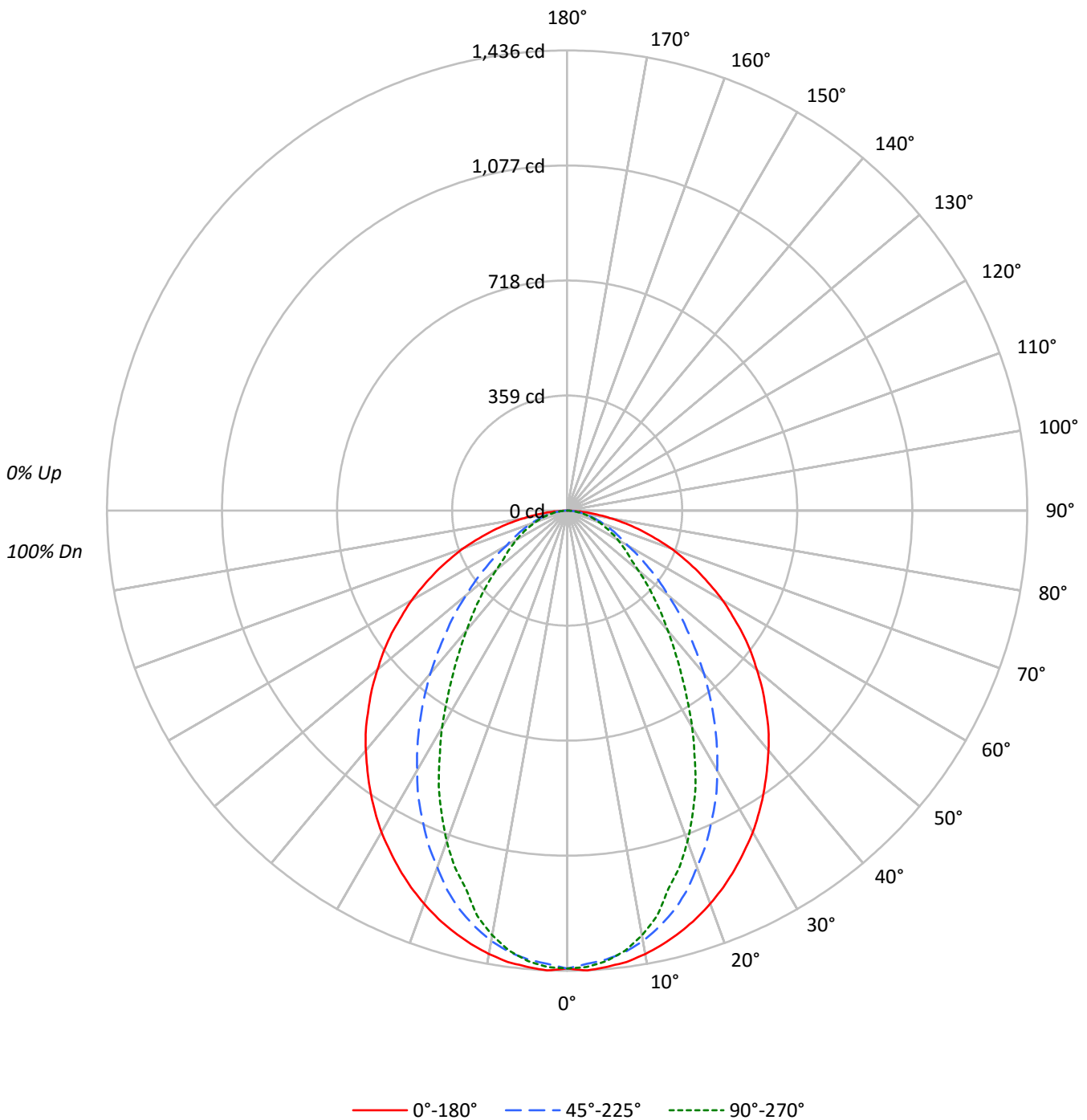
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87					87			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75					75			
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65					65			
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57					57			
5	80	69	60	54	78	67	60	54	65	59	54	64	58	53	62	57	52	50					50			
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41					41			
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34					34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42344	42344	42344
5°	42506	41821	41964
10°	42269	41029	40482
15°	41795	39601	37448
20°	41167	37349	34637
25°	40425	34883	31003
30°	39653	32031	26683
35°	38725	28955	22430
40°	37805	25671	18879
45°	36740	22280	15986
50°	35618	18982	13285
55°	34533	16014	11824
60°	33227	12990	10839
65°	31584	11631	9935
70°	29905	10491	9131
75°	27315	9433	8323
80°	23359	8259	7439
85°	18120	7003	6187



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	5.0
10°-20°	363.6	13.7
20°-30°	496.2	18.7
30°-40°	514.4	19.4
40°-50°	448.8	16.9
50°-60°	337.8	12.7
60°-70°	221.5	8.3
70°-80°	112.9	4.2
80°-90°	28.7	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°	993.7	37.4
0°-40°	1508.1	56.7
0°-60°	2294.7	86.3
0°-90°	2657.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2657.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1429	1422	1406	1415	1411	136
15°	1362	1343	1291	1255	1221	384
25°	1236	1186	1067	977	948	570
35°	1071	979	800	666	620	670
45°	877	750	532	413	382	677
55°	668	509	310	235	229	597
65°	450	281	166	146	142	446
75°	239	109	82	75	73	252
85°	53	22	21	18	18	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.1	1429.1	1429.1	1429.1	1429.1
2.5°	1436.4	1430.3	1415.8	1427.9	1425.5
5°	1429.1	1421.8	1406.1	1414.6	1410.9
7.5°	1420.6	1410.9	1389.1	1392.8	1385.5
10°	1404.9	1392.8	1363.7	1356.4	1345.5
12.5°	1385.5	1372.2	1329.8	1312.8	1295.9
15°	1362.5	1343.1	1291.0	1254.7	1220.8
17.5°	1335.8	1311.6	1242.6	1191.7	1166.3
20°	1305.6	1274.1	1184.5	1125.1	1098.5
22.5°	1272.9	1232.9	1130.0	1054.9	1023.4
25°	1236.5	1185.7	1067.0	977.4	948.3
27.5°	1197.8	1139.6	1006.4	903.5	861.1
30°	1159.0	1086.4	936.2	821.1	779.9
32.5°	1115.4	1033.1	869.6	742.4	696.4
35°	1070.6	978.6	800.5	666.1	620.1
37.5°	1023.4	924.1	731.5	595.9	551.0
40°	977.4	864.7	663.7	528.0	488.1
42.5°	930.1	805.4	595.9	468.7	434.8
45°	876.8	749.7	531.7	413.0	381.5
47.5°	827.2	689.1	473.5	363.3	334.3
50°	772.7	629.8	411.8	317.3	288.2
52.5°	721.8	569.2	360.9	268.9	250.7
55°	668.5	508.7	310.0	235.0	228.9
57.5°	611.6	449.3	265.2	210.7	203.5
60°	560.7	392.4	219.2	188.9	182.9
62.5°	503.8	335.5	190.1	168.3	162.3
65°	450.5	281.0	165.9	146.5	141.7
67.5°	397.2	231.3	142.9	127.2	122.3
70°	345.2	184.1	121.1	109.0	105.4
72.5°	288.2	139.3	101.7	92.0	89.6
75°	238.6	109.0	82.4	75.1	72.7
77.5°	186.5	82.4	64.2	59.3	58.1
80°	136.9	59.3	48.4	44.8	43.6
82.5°	93.3	40.0	33.9	31.5	30.3
85°	53.3	21.8	20.6	18.2	18.2
87.5°	20.6	8.5	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)