

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: P242214

Luminaire Tested: **S121RDR-S1025D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242214
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-S1025D940-X4F0-XX-UDD-F-W
Description: DEFINE 1 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2955.7 lumens
Efficiency: N/A
Efficacy: 71.9 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

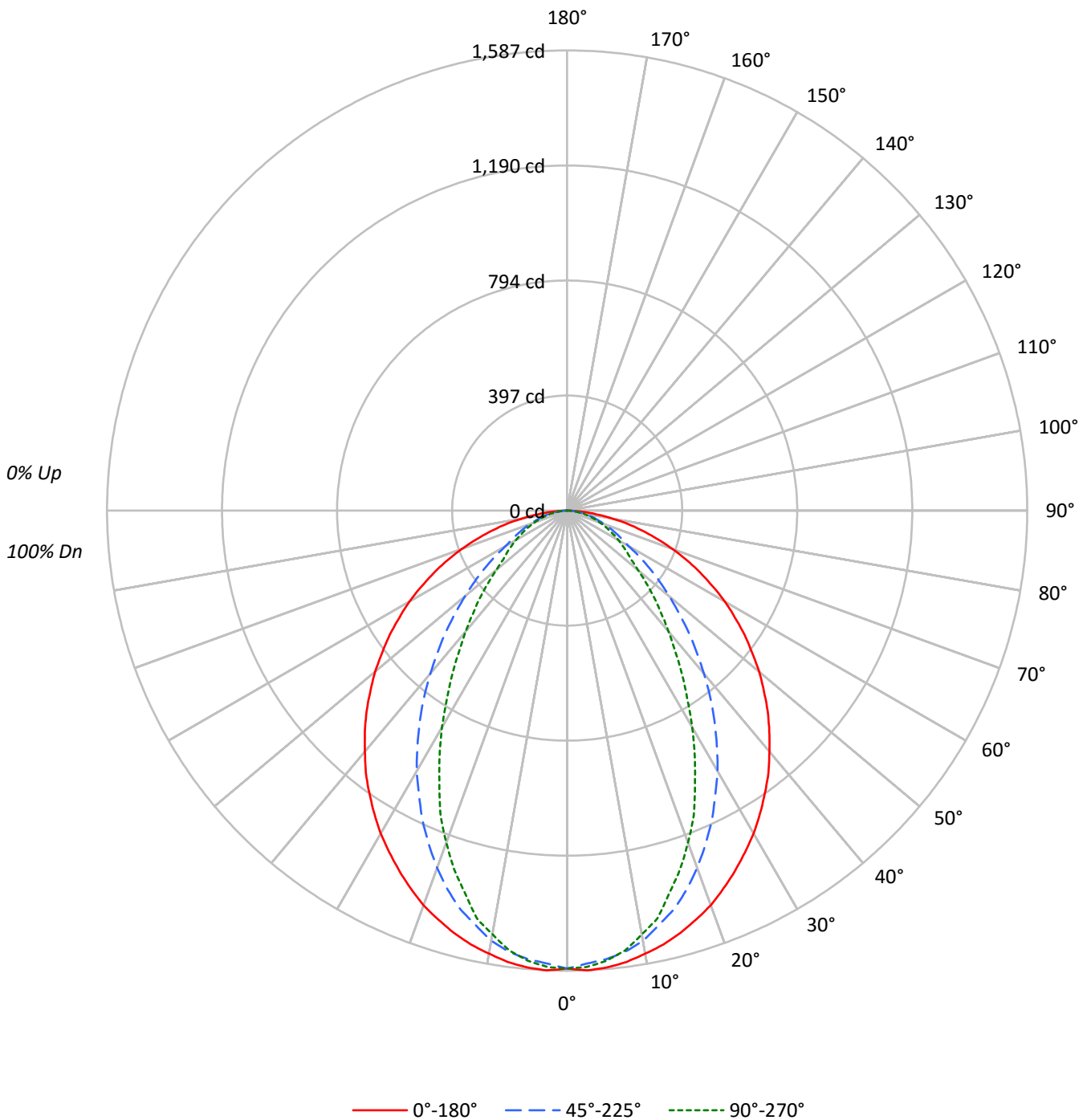
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	46794	46794	46794
5°	47050	46188	46342
10°	46680	45329	44652
15°	46255	43660	41838
20°	45673	41337	38421
25°	44805	38584	34089
30°	43995	35493	29526
35°	43022	32030	25002
40°	41967	28371	21061
45°	40981	24752	17775
50°	39840	21199	14681
55°	38573	17889	13106
60°	37280	14489	12136
65°	35490	13061	11211
70°	33431	11791	10300
75°	30715	10738	9536
80°	26840	9470	8566
85°	22030	8091	7173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.8	5.0
10°-20°	402.1	13.6
20°-30°	548.9	18.6
30°-40°	570.5	19.3
40°-50°	498.4	16.9
50°-60°	376.8	12.7
60°-70°	248.9	8.4
70°-80°	128.3	4.3
80°-90°	34.0	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°	1098.8	37.2
0°-40°	1669.3	56.5
0°-60°	2544.5	86.1
0°-90°	2955.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2955.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1582	1573	1553	1565	1558	150
15°	1508	1486	1423	1386	1364	425
25°	1370	1316	1180	1082	1043	631
35°	1189	1084	886	740	691	744
45°	978	831	591	459	424	754
55°	747	567	346	263	254	667
65°	506	316	186	164	160	501
75°	268	124	94	86	83	286
85°	65	26	24	22	21	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1579.3	1579.3	1579.3	1579.3	1579.3
2.5°	1587.2	1579.3	1563.4	1578.0	1575.3
5°	1581.9	1572.7	1552.9	1564.8	1558.1
7.5°	1570.0	1559.5	1534.4	1538.3	1530.4
10°	1551.5	1539.6	1506.6	1500.0	1484.1
12.5°	1533.0	1514.5	1463.0	1449.8	1440.5
15°	1507.9	1485.5	1423.3	1386.3	1363.9
17.5°	1478.9	1448.5	1370.5	1320.3	1296.5
20°	1448.5	1408.8	1311.0	1242.3	1218.5
22.5°	1410.1	1363.9	1246.3	1164.3	1140.5
25°	1370.5	1316.3	1180.2	1082.4	1042.7
27.5°	1328.2	1262.1	1106.2	996.5	952.9
30°	1285.9	1205.3	1037.4	905.3	863.0
32.5°	1238.3	1148.5	960.8	822.0	771.8
35°	1189.4	1083.7	885.5	740.1	691.2
37.5°	1140.5	1024.2	810.1	663.4	611.9
40°	1085.0	962.1	733.5	582.8	544.5
42.5°	1032.2	897.4	660.8	520.7	479.7
45°	978.0	831.3	590.7	458.6	424.2
47.5°	919.8	766.5	522.0	404.4	370.0
50°	864.3	697.8	459.9	351.5	318.5
52.5°	803.5	633.0	401.8	297.4	278.9
55°	746.7	567.0	346.3	263.0	253.7
57.5°	685.9	503.5	294.7	237.9	227.3
60°	629.1	440.1	244.5	211.5	204.8
62.5°	565.6	379.3	212.8	187.7	181.1
65°	506.2	315.9	186.3	163.9	159.9
67.5°	446.7	261.7	161.2	142.7	138.8
70°	385.9	207.5	136.1	122.9	118.9
72.5°	326.4	158.6	113.7	103.1	100.4
75°	268.3	124.2	93.8	85.9	83.3
77.5°	216.7	95.2	74.0	67.4	66.1
80°	157.3	70.0	55.5	51.5	50.2
82.5°	107.0	47.6	39.6	37.0	34.4
85°	64.8	26.4	23.8	22.5	21.1
87.5°	26.4	11.9	10.6	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)