

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: P242204

Luminaire Tested: **S121RDR-S1025D930-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242204
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-S1025D930-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: 2702.4 lumens
Efficiency: N/A
Efficacy: 65.8 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

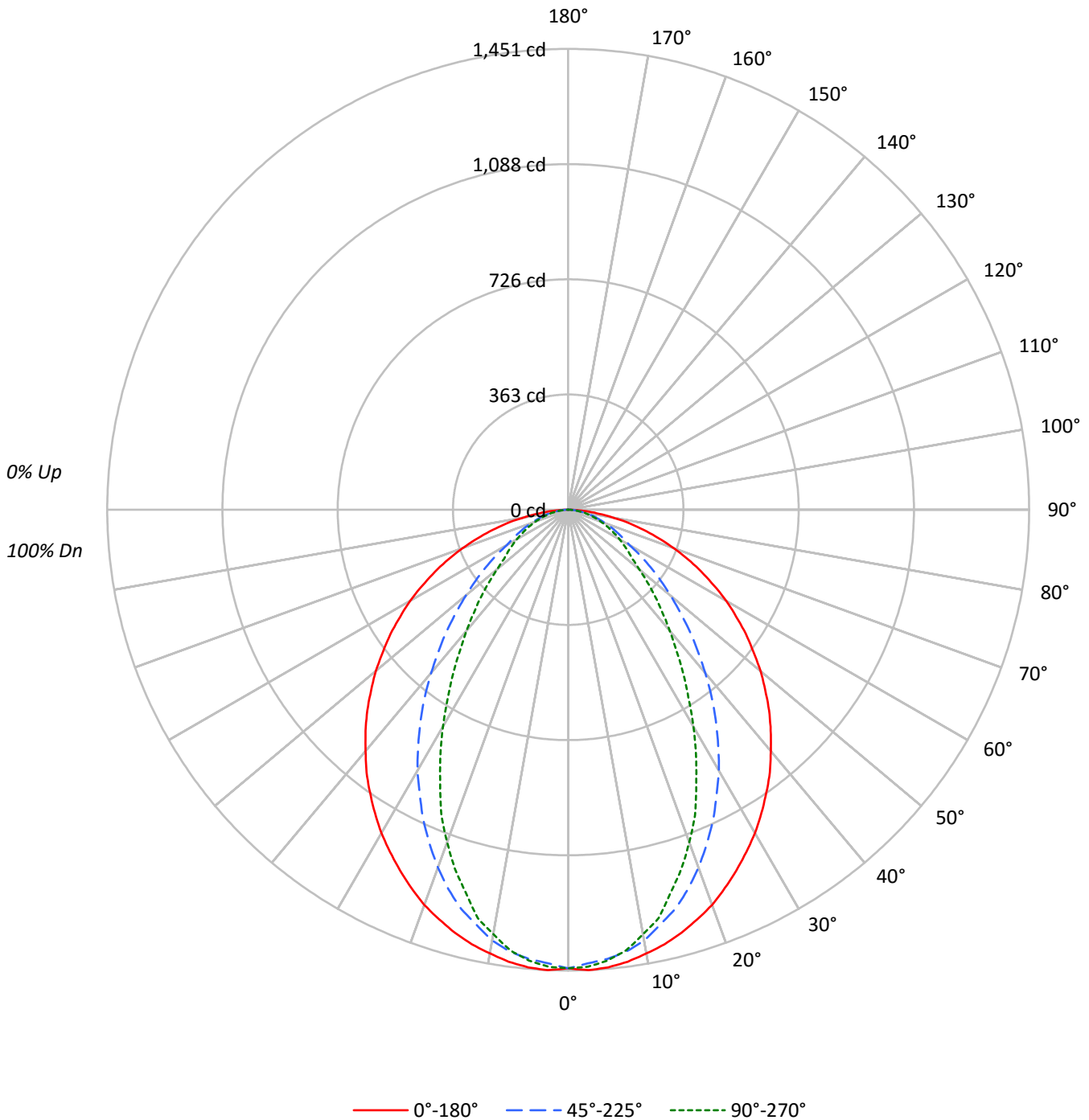
Input Watts (W): 41.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42785	42785	42785
5°	43020	42229	42372
10°	42681	41445	40828
15°	42292	39920	38252
20°	41757	37797	35129
25°	40964	35275	31169
30°	40225	32451	26994
35°	39336	29284	22860
40°	38369	25938	19254
45°	37469	22632	16254
50°	36429	19383	13423
55°	35267	16355	11985
60°	34086	13244	11099
65°	32447	11947	10250
70°	30564	10786	9426
75°	28082	9822	8712
80°	24537	8668	7832
85°	20126	7411	6561



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	5.0
10°-20°	367.6	13.6
20°-30°	501.8	18.6
30°-40°	521.6	19.3
40°-50°	455.7	16.9
50°-60°	344.5	12.7
60°-70°	227.5	8.4
70°-80°	117.3	4.3
80°-90°	31.1	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°	1004.6	37.2
0°-40°	1526.2	56.5
0°-60°	2326.4	86.1
0°-90°	2702.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2702.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1446	1438	1420	1431	1425	137
15°	1379	1358	1301	1268	1247	389
25°	1253	1204	1079	990	953	577
35°	1088	991	810	677	632	680
45°	894	760	540	419	388	689
55°	683	518	317	240	232	610
65°	463	289	170	150	146	458
75°	245	114	86	78	76	261
85°	59	24	22	20	19	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.0	1444.0	1444.0	1444.0	1444.0
2.5°	1451.2	1444.0	1429.5	1442.8	1440.3
5°	1446.4	1437.9	1419.8	1430.7	1424.6
7.5°	1435.5	1425.8	1402.9	1406.5	1399.3
10°	1418.6	1407.7	1377.5	1371.5	1357.0
12.5°	1401.7	1384.8	1337.6	1325.5	1317.1
15°	1378.7	1358.2	1301.4	1267.5	1247.0
17.5°	1352.1	1324.3	1253.0	1207.1	1185.4
20°	1324.3	1288.1	1198.7	1135.8	1114.1
22.5°	1289.3	1247.0	1139.5	1064.5	1042.8
25°	1253.0	1203.5	1079.0	989.6	953.4
27.5°	1214.4	1154.0	1011.4	911.1	871.2
30°	1175.7	1102.0	948.5	827.7	789.0
32.5°	1132.2	1050.0	878.5	751.6	705.7
35°	1087.5	990.8	809.6	676.7	632.0
37.5°	1042.8	936.5	740.7	606.6	559.5
40°	992.0	879.7	670.6	532.9	497.8
42.5°	943.7	820.5	604.2	476.1	438.6
45°	894.2	760.0	540.1	419.3	387.9
47.5°	841.0	700.8	477.3	369.8	338.3
50°	790.3	638.0	420.5	321.4	291.2
52.5°	734.7	578.8	367.3	271.9	255.0
55°	682.7	518.4	316.6	240.5	232.0
57.5°	627.1	460.4	269.5	217.5	207.8
60°	575.2	402.4	223.5	193.3	187.3
62.5°	517.2	346.8	194.5	171.6	165.5
65°	462.8	288.8	170.4	149.8	146.2
67.5°	408.4	239.3	147.4	130.5	126.9
70°	352.8	189.7	124.5	112.4	108.8
72.5°	298.5	145.0	103.9	94.3	91.8
75°	245.3	113.6	85.8	78.5	76.1
77.5°	198.2	87.0	67.7	61.6	60.4
80°	143.8	64.0	50.8	47.1	45.9
82.5°	97.9	43.5	36.3	33.8	31.4
85°	59.2	24.2	21.8	20.5	19.3
87.5°	24.2	10.9	9.7	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)