

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P243756

Luminaire Tested: S125RDRP-H1090D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-H1090D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

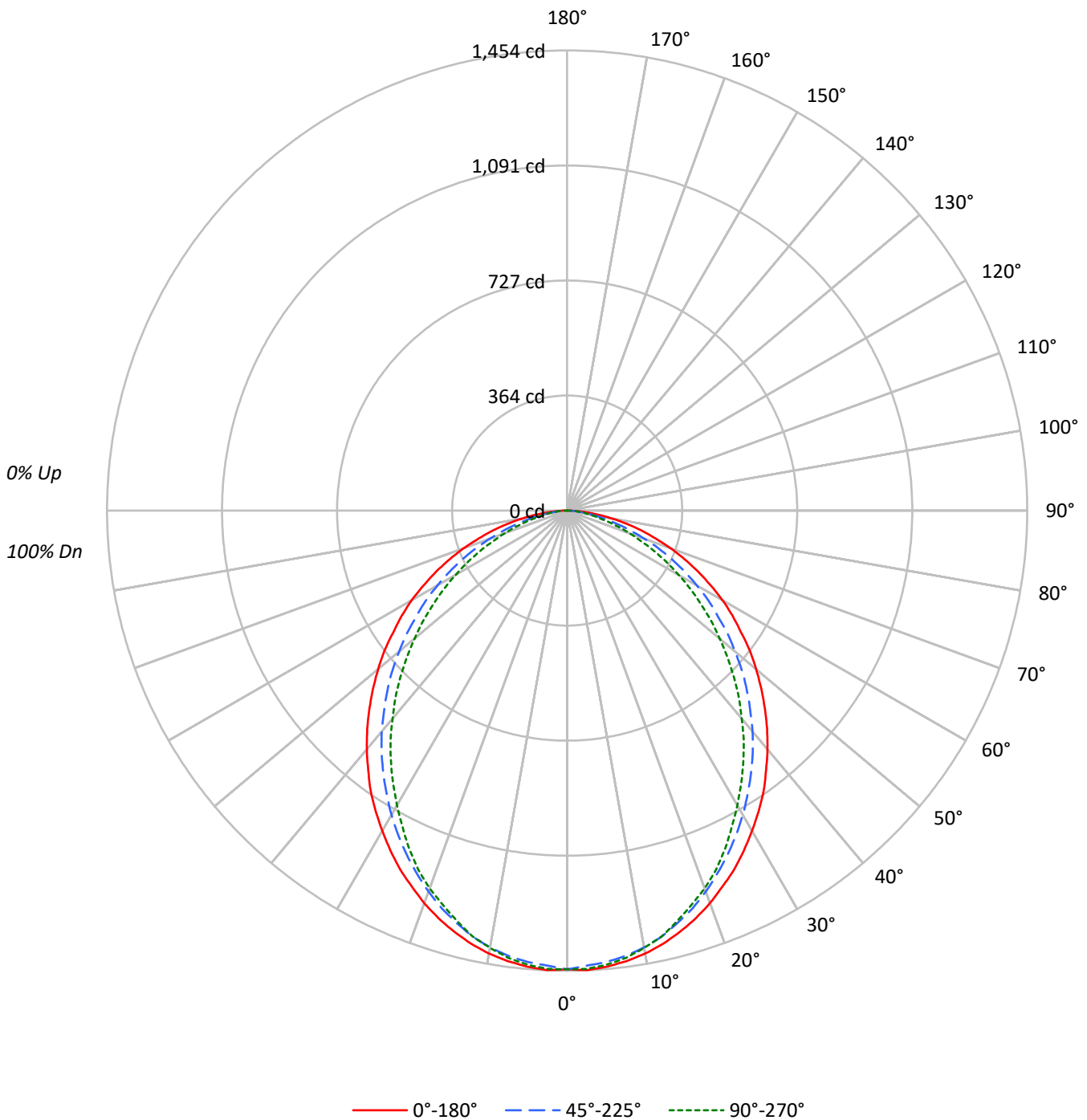
Lumens per Lamp: N/A
Luminaire Lumens: 3464.3 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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: 24 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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32					32			
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29					29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10301	10301	10301
5°	10318	10214	10274
10°	10258	10116	10123
15°	10138	9925	9879
20°	9982	9692	9606
25°	9805	9407	9252
30°	9589	9112	8823
35°	9391	8788	8420
40°	9138	8455	7964
45°	8878	8076	7492
50°	8620	7657	6958
55°	8312	7194	6398
60°	8061	6719	5791
65°	7672	6155	5126
70°	7238	5386	4374
75°	6662	4498	3559
80°	5857	3479	2926
85°	4991	2870	2707

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8878 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.5	3.9
10°-20°	382.4	11.0
20°-30°	556.4	16.1
30°-40°	637.2	18.4
40°-50°	623.5	18.0
50°-60°	526.4	15.2
60°-70°	368.6	10.6
70°-80°	187.2	5.4
80°-90°	46.1	1.3
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°	1075.3	31.0
0°-40°	1712.5	49.4
0°-60°	2862.5	82.6
0°-90°	3464.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3464.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1446	1443	1432	1441	1440	137
15°	1378	1373	1349	1348	1343	388
25°	1250	1236	1200	1187	1180	575
35°	1082	1056	1013	983	970	676
45°	883	854	804	761	745	682
55°	671	642	581	534	516	602
65°	456	421	366	320	305	452
75°	243	212	164	137	130	256
85°	61	39	35	33	33	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.3	1449.3	1449.3	1449.3	1449.3
2.5°	1453.5	1450.4	1439.0	1449.3	1449.3
5°	1446.2	1443.1	1431.7	1441.1	1440.0
7.5°	1435.9	1432.8	1419.3	1428.6	1425.5
10°	1421.4	1417.2	1401.7	1406.8	1402.7
12.5°	1401.7	1397.5	1378.8	1380.9	1378.8
15°	1377.8	1372.6	1348.8	1347.7	1342.6
17.5°	1350.9	1343.6	1317.7	1314.6	1306.3
20°	1319.8	1310.4	1281.4	1275.2	1270.0
22.5°	1284.5	1275.2	1241.0	1231.6	1228.5
25°	1250.3	1235.8	1199.5	1187.1	1179.8
27.5°	1209.9	1193.3	1156.0	1139.4	1126.9
30°	1168.4	1149.7	1110.3	1088.6	1075.1
32.5°	1125.9	1104.1	1061.6	1034.7	1023.3
35°	1082.3	1056.4	1012.9	982.8	970.4
37.5°	1032.6	1006.7	963.1	927.9	916.5
40°	984.9	957.9	911.3	872.9	858.4
42.5°	935.1	907.1	856.3	815.9	803.5
45°	883.3	854.3	803.5	761.0	745.4
47.5°	831.5	802.4	749.6	707.0	687.4
50°	779.6	748.5	692.5	649.0	629.3
52.5°	727.8	693.6	638.6	592.0	574.3
55°	670.8	641.7	580.6	533.9	516.3
57.5°	620.0	587.8	529.8	482.1	462.4
60°	567.1	531.8	472.7	426.1	407.4
62.5°	511.1	475.9	418.8	372.2	355.6
65°	456.2	420.9	366.0	320.3	304.8
67.5°	401.2	368.0	313.1	270.6	253.0
70°	348.3	314.1	259.2	220.8	210.5
72.5°	292.4	265.4	210.5	176.2	168.0
75°	242.6	212.5	163.8	136.8	129.6
77.5°	191.8	162.8	121.3	102.6	96.4
80°	143.1	118.2	85.0	73.6	71.5
82.5°	98.5	74.6	56.0	53.9	52.9
85°	61.2	39.4	35.2	33.2	33.2
87.5°	25.9	16.6	16.6	15.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.53	21.11	19.89	21.42	21.74	18.02	19.60	18.38	19.91	20.23
	3H	21.29	22.71	21.67	23.04	23.40	19.30	20.72	19.68	21.05	21.41
	4H	21.95	23.28	22.34	23.63	24.01	19.69	21.02	20.08	21.37	21.75
	6H	22.42	23.65	22.83	24.02	24.41	19.92	21.16	20.33	21.52	21.91
	8H	22.56	23.74	22.99	24.13	24.53	20.00	21.18	20.42	21.56	21.96
	12H	22.66	23.79	23.09	24.17	24.60	20.05	21.18	20.48	21.56	21.99
4H	2H	19.93	21.26	20.33	21.61	21.99	18.70	20.04	19.10	20.39	20.76
	3H	21.89	23.00	22.30	23.40	23.80	20.17	21.28	20.58	21.68	22.08
	4H	22.67	23.67	23.10	24.09	24.53	20.63	21.64	21.07	22.05	22.49
	6H	23.26	24.14	23.72	24.58	25.04	20.95	21.83	21.41	22.27	22.72
	8H	23.45	24.27	23.91	24.71	25.18	21.06	21.87	21.52	22.32	22.78
	12H	23.59	24.32	24.07	24.79	25.26	21.14	21.87	21.62	22.35	22.82
8H	4H	22.79	23.61	23.25	24.05	24.52	20.94	21.76	21.40	22.20	22.67
	6H	23.47	24.14	23.96	24.63	25.11	21.34	22.01	21.83	22.50	22.98
	8H	23.70	24.31	24.22	24.82	25.31	21.49	22.10	22.00	22.60	23.09
	12H	23.89	24.43	24.40	24.92	25.48	21.63	22.16	22.14	22.65	23.22
12H	4H	22.78	23.52	23.27	23.99	24.46	20.98	21.71	21.46	22.19	22.66
	6H	23.46	24.07	23.97	24.57	25.06	21.39	21.99	21.90	22.50	22.99
	8H	23.74	24.27	24.24	24.76	25.33	21.59	22.12	22.09	22.61	23.18