

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: P243739

Luminaire Tested: S125RDRP-H375D835-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243739
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-H375D835-X4F0-XX-UDD-F-W
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

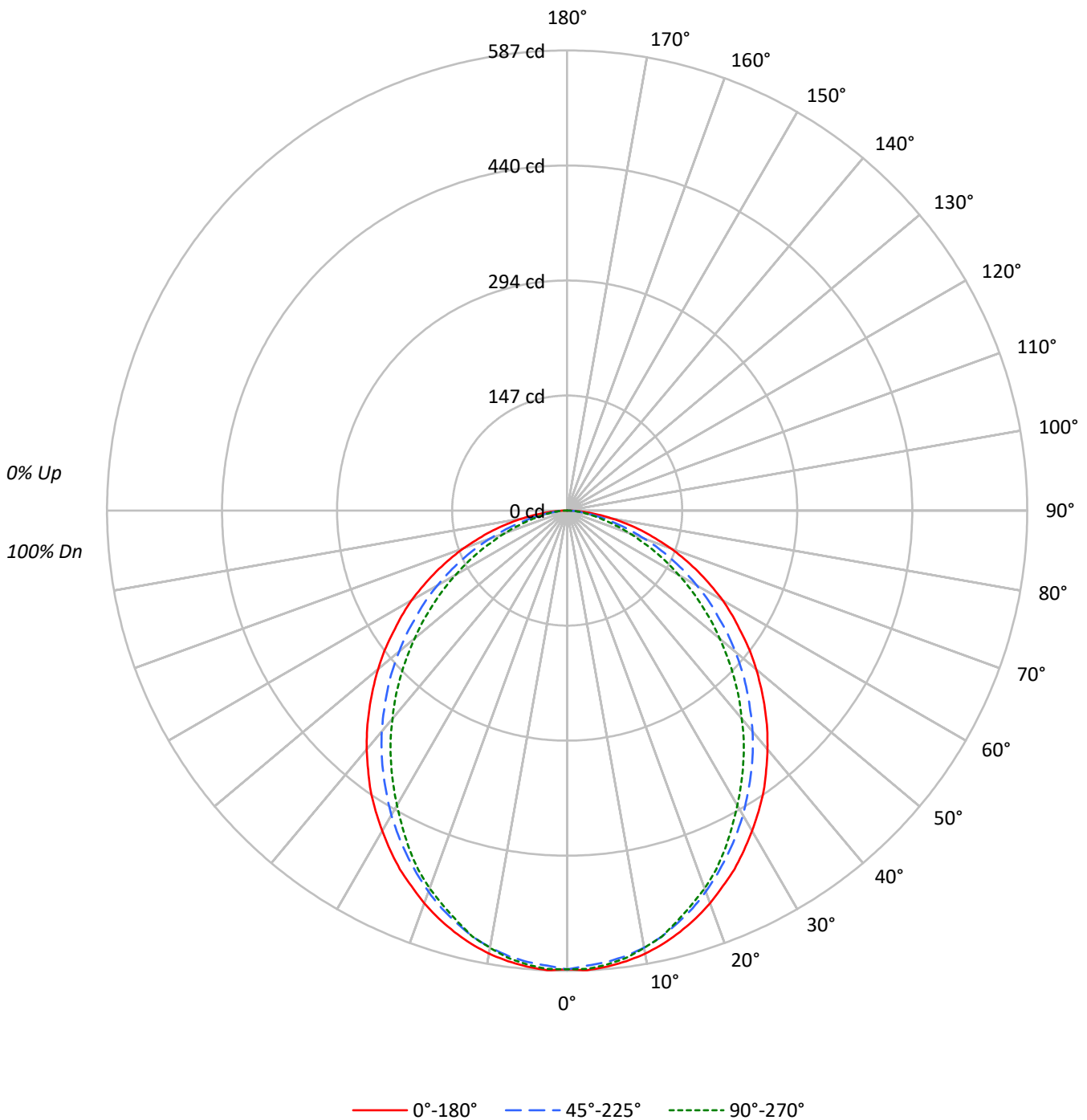
Lumens per Lamp: N/A
Luminaire Lumens: 1398.9 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 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: 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4159	4159	4159
5°	4167	4124	4149
10°	4142	4085	4088
15°	4094	4007	3989
20°	4031	3913	3879
25°	3959	3799	3736
30°	3872	3680	3563
35°	3792	3549	3399
40°	3690	3414	3216
45°	3585	3261	3025
50°	3481	3092	2810
55°	3357	2905	2584
60°	3255	2714	2338
65°	3098	2486	2070
70°	2924	2176	1766
75°	2691	1815	1436
80°	2366	1404	1183
85°	2014	1158	1093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3585 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	3.9
10°-20°	154.4	11.0
20°-30°	224.7	16.1
30°-40°	257.3	18.4
40°-50°	251.8	18.0
50°-60°	212.6	15.2
60°-70°	148.8	10.6
70°-80°	75.6	5.4
80°-90°	18.6	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°	434.2	31.0
0°-40°	691.5	49.4
0°-60°	1155.9	82.6
0°-90°	1398.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1398.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	585	585	585	585	585	
5°	584	583	578	582	582	55
15°	556	554	545	544	542	157
25°	505	499	484	479	476	232
35°	437	427	409	397	392	273
45°	357	345	324	307	301	275
55°	271	259	234	216	208	243
65°	184	170	148	129	123	182
75°	98	86	66	55	52	104
85°	25	16	14	13	13	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	585.2	585.2	585.2	585.2	585.2
2.5°	586.9	585.7	581.1	585.2	585.2
5°	584.0	582.7	578.1	581.9	581.5
7.5°	579.8	578.5	573.1	576.9	575.6
10°	573.9	572.3	566.0	568.1	566.4
12.5°	566.0	564.3	556.8	557.6	556.8
15°	556.4	554.3	544.6	544.2	542.1
17.5°	545.5	542.5	532.1	530.8	527.5
20°	532.9	529.1	517.4	514.9	512.8
22.5°	518.7	514.9	501.1	497.3	496.1
25°	504.9	499.0	484.4	479.3	476.4
27.5°	488.5	481.8	466.8	460.1	455.1
30°	471.8	464.3	448.4	439.6	434.1
32.5°	454.6	445.8	428.7	417.8	413.2
35°	437.1	426.6	409.0	396.9	391.8
37.5°	417.0	406.5	388.9	374.7	370.1
40°	397.7	386.8	368.0	352.5	346.6
42.5°	377.6	366.3	345.8	329.5	324.4
45°	356.7	345.0	324.4	307.3	301.0
47.5°	335.7	324.0	302.7	285.5	277.6
50°	314.8	302.3	279.6	262.1	254.1
52.5°	293.9	280.1	257.9	239.0	231.9
55°	270.9	259.1	234.4	215.6	208.5
57.5°	250.3	237.4	213.9	194.7	186.7
60°	229.0	214.8	190.9	172.1	164.5
62.5°	206.4	192.2	169.1	150.3	143.6
65°	184.2	170.0	147.8	129.4	123.1
67.5°	162.0	148.6	126.4	109.3	102.1
70°	140.7	126.8	104.7	89.2	85.0
72.5°	118.1	107.2	85.0	71.2	67.8
75°	98.0	85.8	66.1	55.3	52.3
77.5°	77.4	65.7	49.0	41.4	38.9
80°	57.8	47.7	34.3	29.7	28.9
82.5°	39.8	30.1	22.6	21.8	21.4
85°	24.7	15.9	14.2	13.4	13.4
87.5°	10.5	6.7	6.7	6.3	6.7
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	16.38	17.96	16.74	18.27	18.59	14.87	16.45	15.23	16.76	17.08
	3H	18.14	19.56	18.52	19.89	20.25	16.15	17.57	16.53	17.90	18.26
	4H	18.80	20.13	19.20	20.48	20.86	16.54	17.87	16.93	18.22	18.60
	6H	19.27	20.50	19.68	20.87	21.26	16.77	18.01	17.18	18.37	18.76
	8H	19.41	20.59	19.84	20.98	21.38	16.85	18.02	17.27	18.41	18.81
	12H	19.51	20.64	19.94	21.02	21.45	16.90	18.03	17.33	18.41	18.84
4H	2H	16.78	18.11	17.18	18.46	18.84	15.55	16.89	15.95	17.24	17.61
	3H	18.74	19.85	19.15	20.25	20.65	17.02	18.13	17.43	18.53	18.93
	4H	19.52	20.52	19.95	20.94	21.38	17.48	18.49	17.92	18.90	19.34
	6H	20.11	20.99	20.57	21.43	21.89	17.80	18.68	18.26	19.12	19.57
	8H	20.30	21.12	20.76	21.56	22.03	17.91	18.72	18.37	19.17	19.63
	12H	20.44	21.17	20.92	21.64	22.11	17.99	18.72	18.47	19.20	19.67
8H	4H	19.64	20.46	20.10	20.90	21.37	17.79	18.61	18.25	19.05	19.52
	6H	20.32	20.99	20.81	21.48	21.96	18.19	18.86	18.68	19.35	19.83
	8H	20.55	21.16	21.06	21.67	22.15	18.34	18.95	18.85	19.45	19.94
	12H	20.74	21.28	21.25	21.77	22.33	18.48	19.01	18.99	19.50	20.07
12H	4H	19.63	20.37	20.11	20.84	21.31	17.83	18.56	18.31	19.04	19.51
	6H	20.31	20.91	20.82	21.42	21.91	18.23	18.84	18.75	19.35	19.84
	8H	20.58	21.12	21.09	21.61	22.17	18.44	18.97	18.94	19.46	20.03