

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: STREETWORKS

Report Number: P270996

Luminaire Tested: **NVN-AF-04-LED-U-SL3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-04-LED-U-SL3-7027-800
Description: NAVION ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17102.3 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

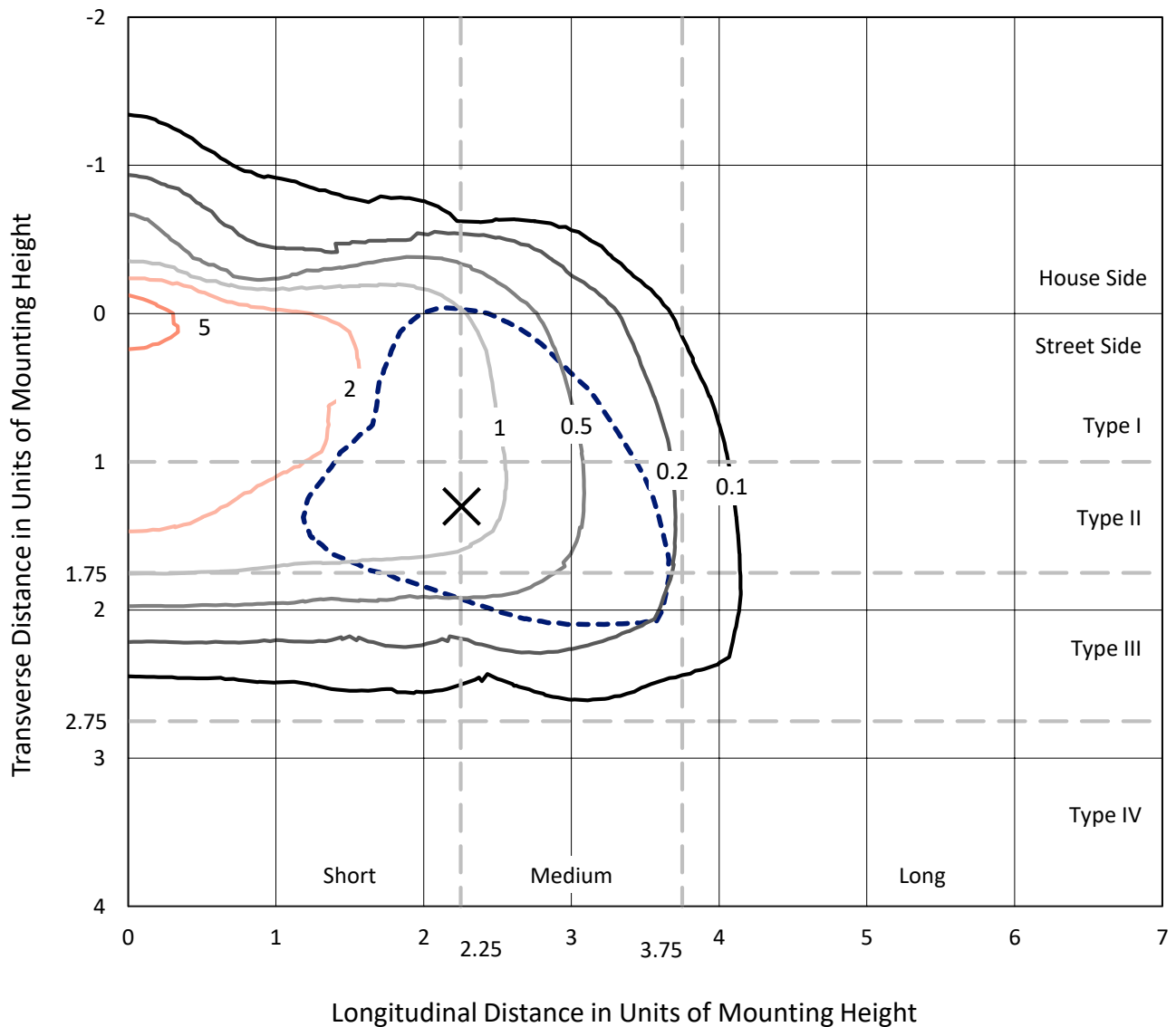
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

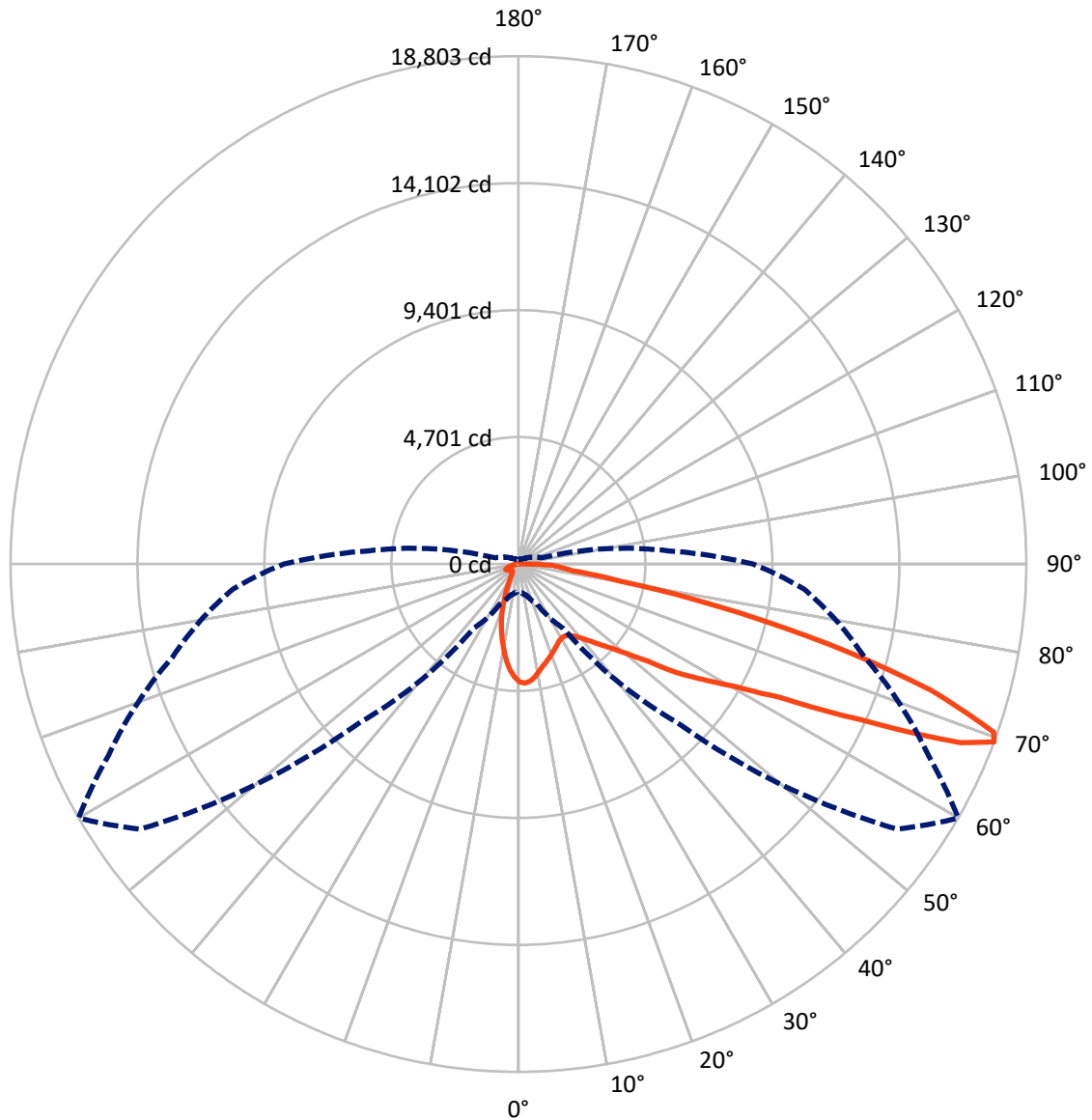
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2439.3	0.0	2439.3
	% Fixture	14.3	0.0	14.3
Street Side	Lumens	14663.0	0.0	14663.0
	% Fixture	85.7	0.0	85.7
Total	Lumens	17102.3	0.0	17102.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.2	2.2
10°-20°	792.6	4.6
20°-30°	1011.1	5.9
30°-40°	1391.4	8.1
40°-50°	2253.8	13.2
50°-60°	3537.3	20.7
60°-70°	4715.9	27.6
70°-80°	2623.1	15.3
80°-90°	406.8	2.4
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°-90°	17102.3	100.0
0°-180°	17102.3	100.0

Coefficient of Utilization



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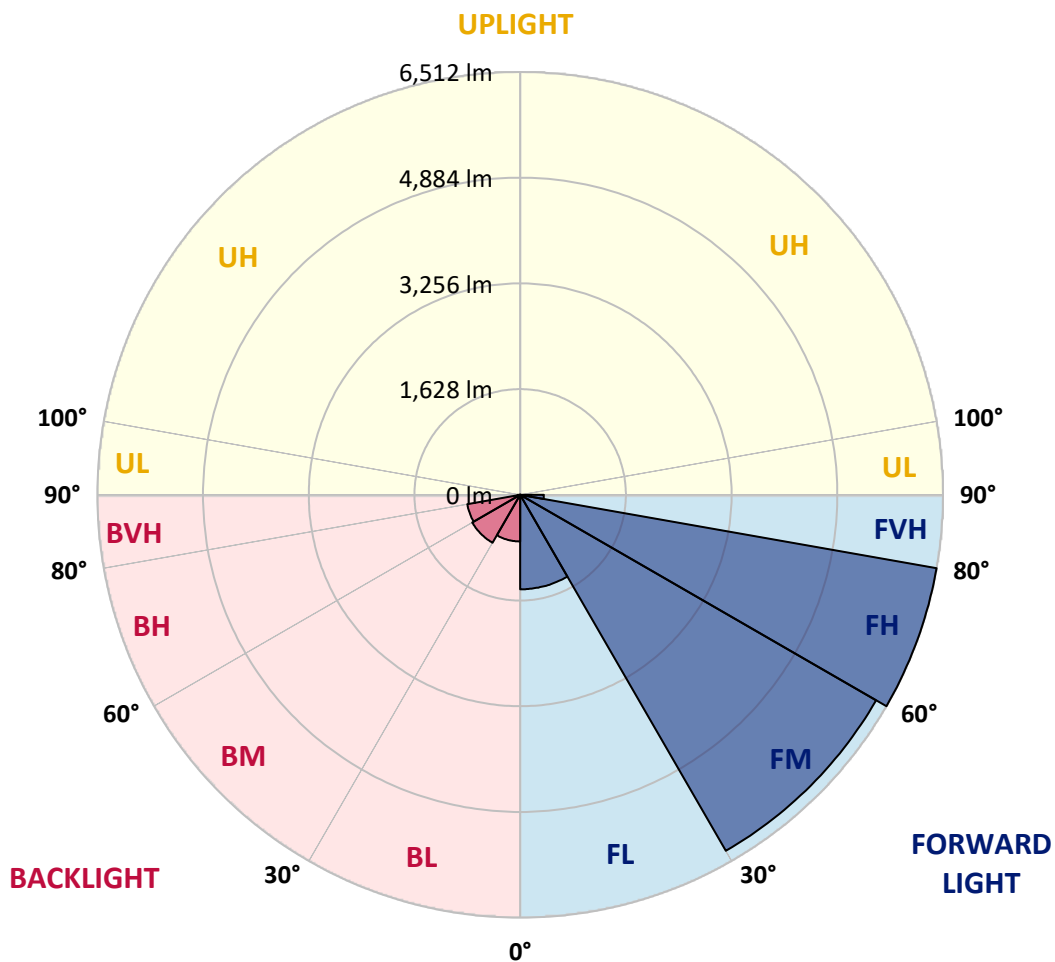
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1455.1	8.5			
FM (30°-60°)	6330.4	37.0			
FH (60°-80°)	6511.9	38.1			G3/7500
FVH (80°-90°)	365.6	2.1			G3/500
BL (0°-30°)	718.9	4.2	B2/1000		
BM (30°-60°)	852.2	5.0	B1/1000		
BH (60°-80°)	827.1	4.8	B2/1000		G2/1000
BVH (80°-90°)	41.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6
2.5°	4479.9	4492.1	4492.1	4482.2	4476.7	4444.9	4426.2	4413.1	4390.0	4347.3	4308.9
5°	4319.8	4342.9	4352.7	4357.0	4385.6	4375.7	4376.9	4368.1	4348.3	4302.3	4239.8
7.5°	4025.9	4030.3	4047.9	4077.4	4146.5	4194.8	4234.3	4241.9	4237.6	4203.6	4115.9
10°	3736.4	3744.0	3764.9	3815.5	3881.1	3950.2	4035.7	4070.8	4097.2	4086.2	3975.4
12.5°	3496.3	3497.3	3520.4	3578.5	3652.0	3738.6	3854.8	3909.7	3972.1	3997.4	3873.5
15°	3264.8	3280.3	3302.1	3372.2	3463.3	3573.0	3706.8	3782.5	3864.7	3937.1	3794.5
17.5°	3089.5	3101.4	3114.7	3172.8	3277.9	3415.0	3580.6	3661.9	3770.4	3881.1	3713.4
20°	2992.9	2997.3	2987.4	3015.9	3104.7	3252.8	3444.7	3542.2	3671.7	3827.4	3630.1
22.5°	2973.1	2973.1	2936.9	2931.3	2971.0	3096.0	3304.3	3423.9	3581.8	3790.2	3555.4
25°	3065.2	3058.6	2990.6	2928.1	2913.9	2977.5	3170.5	3317.5	3504.9	3789.1	3499.5
27.5°	3239.6	3230.8	3146.5	3041.1	2950.0	2922.6	3067.4	3217.6	3444.7	3826.3	3471.1
30°	3456.8	3453.4	3367.9	3236.4	3086.0	2944.6	3026.8	3166.2	3404.0	3895.4	3470.0
32.5°	3694.6	3679.4	3626.7	3495.1	3300.0	3066.4	3051.0	3168.3	3393.2	3996.3	3495.1
35°	3948.1	3937.1	3923.9	3791.2	3571.9	3281.2	3157.4	3244.0	3446.8	4136.6	3566.5
37.5°	4270.5	4258.4	4280.3	4135.5	3895.4	3563.1	3337.3	3395.4	3556.6	4340.7	3699.1
40°	4844.1	4808.9	4747.5	4524.9	4272.7	3908.5	3597.2	3605.8	3744.0	4613.8	3911.8
42.5°	5786.2	5673.2	5369.3	4960.4	4670.7	4310.0	3936.1	3894.3	4002.8	4974.5	4221.1
45°	6730.3	6603.1	6089.9	5435.1	5083.1	4741.0	4355.0	4255.1	4325.2	5394.6	4619.3
47.5°	7340.1	7277.6	6698.5	5909.9	5515.2	5210.3	4834.1	4669.7	4720.1	5870.6	5110.5
50°	7518.9	7465.2	7010.1	6281.8	5923.2	5777.3	5427.5	5209.2	5218.1	6426.6	5699.4
52.5°	7385.1	7363.1	7061.5	6512.2	6298.2	6375.0	6248.9	5945.2	5872.8	7036.3	6337.7
55°	7206.4	7214.0	7097.8	6743.5	6679.8	6932.1	7323.6	7079.2	6772.1	7671.3	7002.4
57.5°	6643.8	6649.3	6954.0	7184.4	7408.1	7712.9	8160.5	8057.3	7699.8	8356.8	7747.1
60°	5349.6	5392.3	6071.3	7093.3	8240.5	9251.6	9361.2	9183.6	8686.8	9146.4	8715.4
62.5°	3822.0	3860.3	4646.7	6157.9	8142.9	10993.2	11578.9	10872.5	10026.0	10327.5	10077.5
65°	2008.0	2001.5	2610.1	4255.1	6858.6	11396.7	15072.8	13870.9	12281.7	11951.7	11393.5
67.5°	1122.0	1158.2	1393.9	2146.2	4470.1	10030.3	17304.6	17658.8	15418.2	13240.3	11336.4
69°	1037.5	1049.5	1207.4	1659.3	2913.9	8275.5	17112.7	18802.7	16741.0	13245.8	10606.1
70°	1007.9	1021.1	1164.7	1528.7	2447.8	6780.8	16414.1	18668.8	17062.2	12951.9	9941.5
72.5°	903.7	921.2	1060.4	1374.1	2062.9	3495.1	13221.7	15978.7	15455.6	11320.0	7708.5
75°	770.9	800.6	1011.1	1364.3	1954.4	2221.9	8817.4	11904.5	11503.2	8095.7	4373.6
77.5°	319.2	322.4	442.0	999.0	2050.8	2126.5	4738.7	7540.8	6675.6	3550.0	1317.2
80°	222.6	218.3	220.4	291.7	1654.9	2140.8	2431.4	3835.1	2980.8	936.6	616.3
82.5°	187.6	185.3	194.2	183.2	560.5	2429.1	2033.3	1999.3	1403.7	504.5	293.9
85°	124.0	120.6	159.0	166.6	266.4	1929.1	2186.8	1571.6	1046.3	269.9	125.0
87.5°	60.4	61.4	91.0	112.9	141.5	610.8	2094.7	1242.5	808.2	117.4	50.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6	4363.6
2.5°	4293.4	4260.7	4230.9	4193.7	4165.3	4141.0	4108.2	4107.1	4101.7	4109.2	4111.5
5°	4198.0	4143.3	4059.9	3966.7	3900.9	3814.3	3729.9	3701.2	3669.4	3666.3	3676.0
7.5°	4054.4	3968.9	3826.3	3683.8	3541.2	3395.4	3257.2	3186.9	3118.9	3098.2	3108.0
10°	3894.3	3785.7	3567.4	3335.0	3134.4	2917.2	2706.7	2570.6	2446.8	2394.1	2407.2
12.5°	3769.3	3631.0	3324.1	3022.4	2722.0	2410.5	2133.0	1864.3	1661.4	1570.4	1575.9
15°	3661.9	3485.2	3096.0	2694.6	2318.3	1891.8	1506.8	1195.4	1017.7	951.9	949.7
17.5°	3545.6	3331.8	2858.0	2389.8	1901.6	1374.1	1008.9	824.7	754.5	732.6	732.6
20°	3421.6	3173.8	2608.9	2057.4	1463.0	959.6	758.9	687.7	661.3	654.8	653.6
22.5°	3306.5	3019.2	2358.9	1703.1	1058.4	728.2	645.9	618.6	614.1	619.7	619.7
25°	3215.6	2883.2	2105.6	1330.3	769.8	609.8	574.6	571.4	587.9	607.6	610.8
27.5°	3147.5	2761.5	1855.5	971.6	605.4	530.8	518.7	533.0	571.4	610.8	618.6
30°	3100.3	2657.2	1556.3	698.6	504.5	465.1	470.5	495.8	553.9	614.1	630.6
32.5°	3079.5	2572.8	1254.7	536.3	430.9	409.1	423.3	456.2	516.5	576.8	596.7
35°	3099.2	2511.4	976.1	445.3	377.3	360.8	377.3	411.2	450.7	480.4	492.5
37.5°	3170.5	2489.5	734.8	394.9	342.2	325.7	338.9	361.8	379.4	390.5	396.0
40°	3320.8	2512.5	575.8	368.5	322.4	303.7	307.1	318.0	330.0	338.9	340.0
42.5°	3559.9	2588.1	512.2	358.7	310.4	286.2	280.7	288.4	301.7	313.7	315.8
45°	3877.9	2714.3	505.6	361.8	304.9	271.9	261.0	268.8	286.2	306.0	309.2
47.5°	4289.1	2913.9	536.3	379.4	308.2	264.3	247.8	255.5	278.6	304.9	309.2
50°	4776.1	3190.3	593.3	405.8	323.5	264.3	242.4	248.9	273.1	302.6	307.1
52.5°	5349.6	3575.2	652.4	432.1	345.5	274.2	244.6	243.5	265.4	292.8	298.2
55°	5982.4	4053.3	709.5	455.1	357.5	287.4	250.1	237.0	254.4	276.4	280.7
57.5°	6727.0	4708.0	809.4	477.1	364.2	297.2	256.6	230.2	240.1	255.5	258.8
60°	7737.1	5669.8	1003.4	514.3	376.2	301.7	257.8	223.7	222.6	233.6	234.6
62.5°	9054.2	6796.1	1188.7	558.1	400.3	302.6	253.3	219.4	208.3	211.7	211.7
65°	9990.8	7210.8	1135.1	595.4	422.3	301.7	248.9	216.0	197.4	191.9	191.9
67.5°	9457.9	6369.5	964.1	605.4	424.4	289.6	239.0	208.3	187.6	174.5	174.5
69°	8674.8	5583.2	885.0	587.9	406.8	275.3	228.1	200.7	181.0	165.6	165.6
70°	8036.4	4987.7	836.9	567.0	386.0	263.3	218.3	193.0	174.5	161.2	160.1
72.5°	6000.0	3328.4	715.1	489.1	316.9	222.6	190.8	172.1	156.8	148.0	148.0
75°	3166.2	1668.1	585.6	399.1	244.6	177.7	156.8	144.7	136.1	134.8	133.8
77.5°	1037.5	754.5	421.1	300.6	179.8	138.2	125.0	117.4	116.2	120.6	120.6
80°	560.5	450.7	270.8	202.8	125.0	103.0	96.5	95.4	98.8	105.3	105.3
82.5°	271.9	222.6	161.2	125.0	85.6	75.6	75.6	76.7	81.1	88.8	88.8
85°	117.4	105.3	93.2	70.2	52.6	47.2	53.8	59.2	62.5	68.0	70.2
87.5°	56.0	49.3	42.8	27.4	23.0	24.2	28.6	35.2	41.7	46.1	47.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)