

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: P196055

Luminaire Tested: **NVN-AF-05-LED-U-RW-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-05-LED-U-RW-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34480.6 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Medium - Full Cutoff
BUG Rating: B5 - U0 - G3

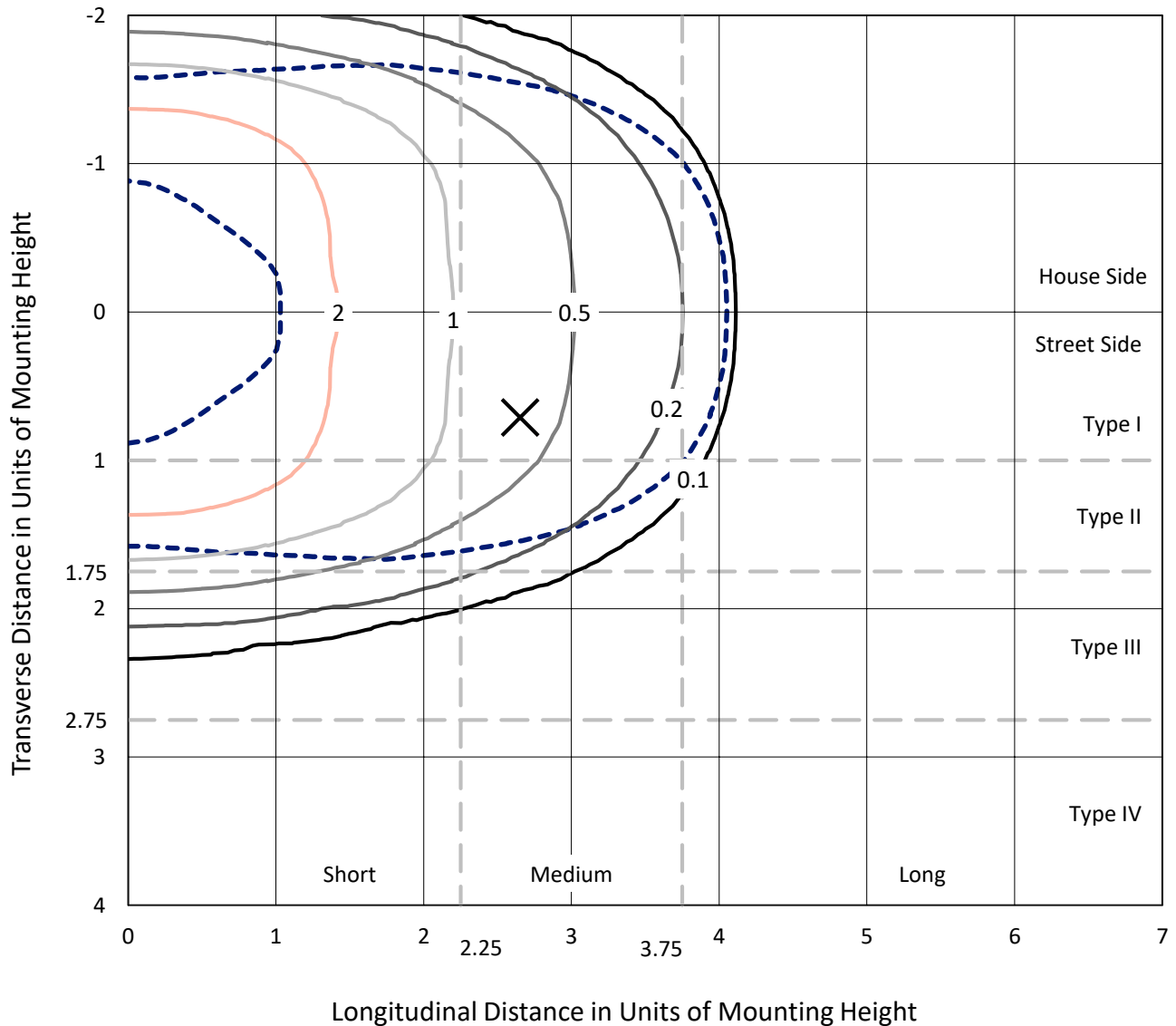
Input Watts (W): 320
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

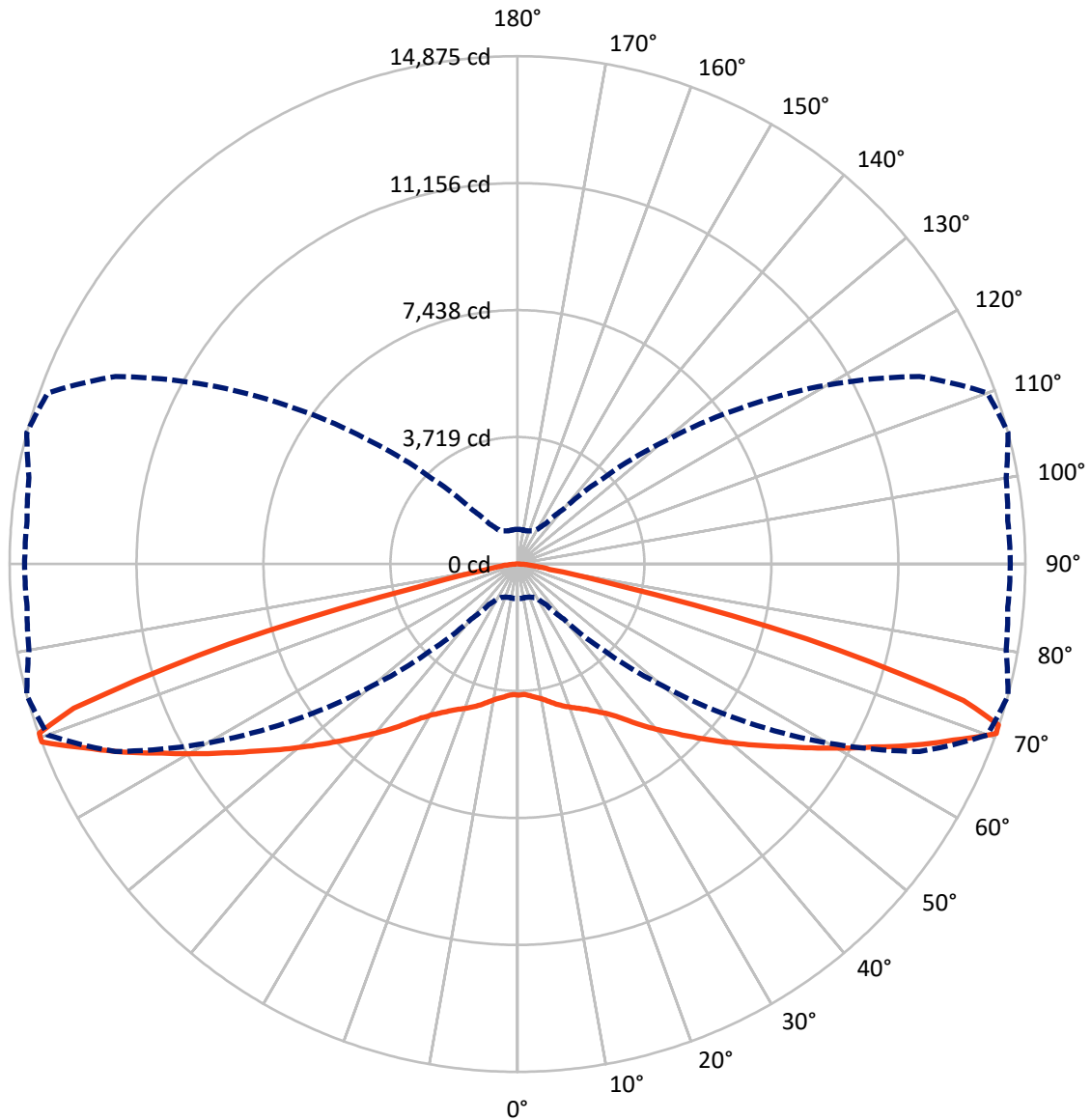
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 fc
 Type V - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17240.3	0.0	17240.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17240.3	0.0	17240.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	34480.6	0.0	34480.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.3	1.1
10°-20°	1142.2	3.3
20°-30°	2145.3	6.2
30°-40°	3779.0	11.0
40°-50°	6263.0	18.2
50°-60°	8712.8	25.3
60°-70°	8225.0	23.9
70°-80°	3513.0	10.2
80°-90°	332.0	1.0
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°	34480.6	100.0
0°-180°	34480.6	100.0

Coefficient of Utilization



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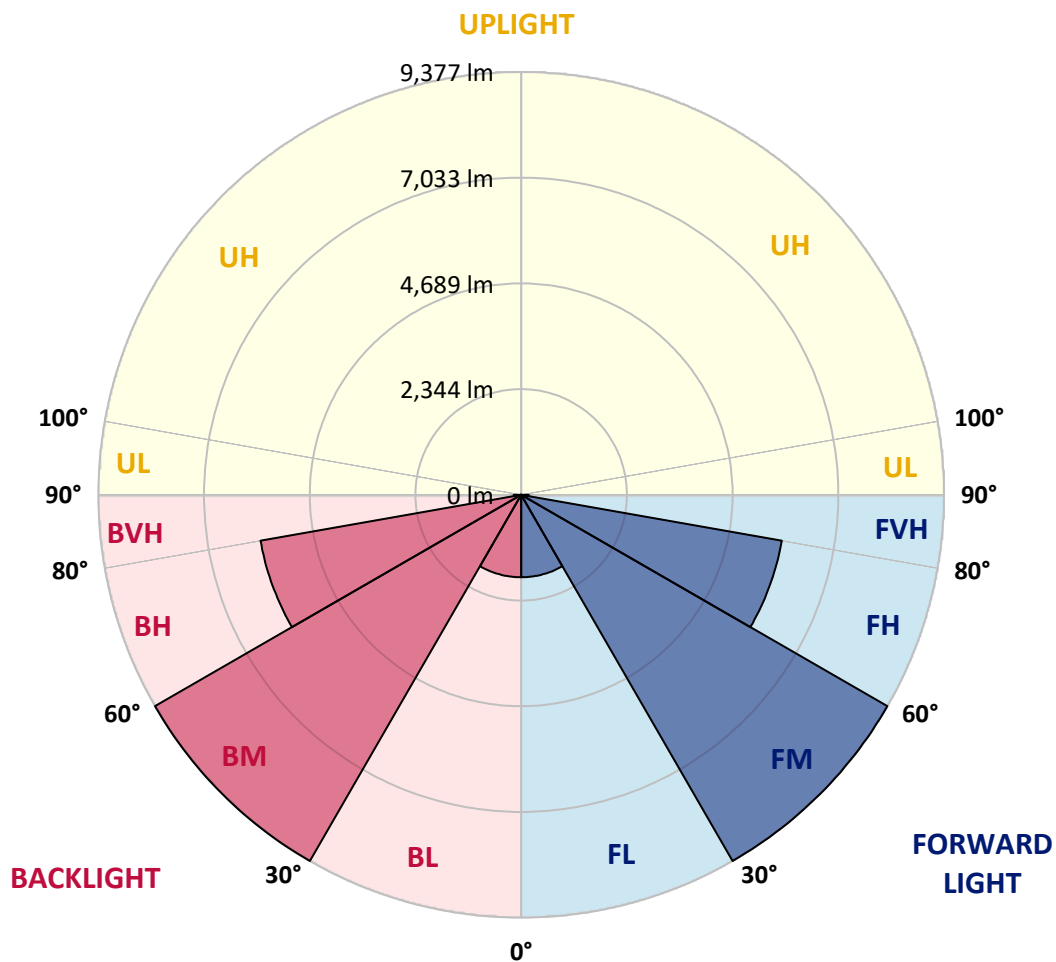
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1827.9	5.3			
FM	(30°-60°)	9377.4	27.2			
FH	(60°-80°)	5869.0	17.0			G3/7500
FVH	(80°-90°)	166.0	0.5			G2/225
BL	(0°-30°)	1827.9	5.3	B3/2500		
BM	(30°-60°)	9377.4	27.2	B5		
BH	(60°-80°)	5869.0	17.0	B5		G3/7500
BVH	(80°-90°)	166.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7
2.5°	3863.5	3861.3	3863.5	3857.0	3859.2	3857.0	3857.0	3848.4	3848.4	3844.0	3837.6
5°	3820.3	3824.6	3824.6	3824.6	3831.2	3831.2	3839.7	3841.9	3848.4	3854.9	3859.2
7.5°	3749.0	3751.2	3757.6	3762.0	3774.9	3792.2	3809.5	3828.9	3846.2	3867.9	3891.6
10°	3688.5	3692.9	3703.6	3714.4	3738.2	3759.8	3790.0	3820.3	3850.6	3887.3	3924.0
12.5°	3656.1	3662.6	3679.9	3697.1	3733.9	3762.0	3803.0	3850.6	3891.6	3926.2	3967.2
15°	3660.4	3662.6	3686.3	3710.1	3762.0	3800.9	3859.2	3915.3	3965.1	4003.9	4051.5
17.5°	3723.0	3727.4	3751.2	3785.7	3835.5	3885.2	3947.8	4006.2	4073.1	4118.5	4174.7
20°	3846.2	3852.7	3878.6	3915.3	3969.4	4021.2	4086.1	4146.6	4215.7	4269.8	4326.0
22.5°	4006.2	4016.9	4045.1	4090.4	4144.4	4207.1	4274.1	4336.7	4401.6	4455.6	4503.1
25°	4220.1	4233.0	4263.2	4308.7	4362.7	4429.7	4498.8	4563.6	4630.6	4671.6	4710.6
27.5°	4507.4	4529.0	4561.4	4598.2	4645.7	4717.0	4781.9	4835.9	4900.8	4946.1	4972.1
30°	4894.2	4924.5	4950.4	4989.3	5023.9	5099.5	5151.4	5194.5	5244.3	5270.2	5276.7
32.5°	5367.4	5395.6	5421.4	5449.6	5497.1	5566.3	5615.9	5639.7	5665.6	5661.3	5637.6
35°	5901.2	5922.8	5937.9	5987.6	6065.4	6110.8	6147.5	6156.1	6160.4	6115.1	6069.7
37.5°	6463.0	6488.9	6501.9	6579.6	6653.2	6704.9	6722.2	6741.8	6728.8	6653.2	6571.0
40°	7070.1	7098.3	7137.1	7204.1	7290.6	7340.3	7361.9	7359.7	7348.9	7260.3	7126.4
42.5°	7666.5	7701.1	7733.5	7850.2	7921.5	8005.8	8016.6	8014.4	7990.7	7889.1	7733.5
45°	8172.1	8213.3	8280.2	8409.9	8524.4	8625.9	8667.0	8682.1	8658.4	8550.3	8373.2
47.5°	8589.2	8617.3	8701.5	8859.3	9006.3	9155.3	9237.5	9295.8	9293.6	9215.9	9027.8
50°	8874.4	8906.8	9010.6	9187.7	9371.5	9546.5	9708.5	9840.3	9903.0	9846.8	9671.8
52.5°	8956.5	8997.6	9133.7	9345.5	9559.4	9795.0	10037.0	10270.3	10410.8	10445.4	10309.2
55°	8610.8	8656.2	8855.0	9148.9	9501.1	9849.0	10216.3	10549.1	10838.6	10972.6	10918.6
57.5°	7603.9	7636.3	7889.1	8269.4	8772.8	9384.3	10002.4	10611.7	11108.7	11456.6	11517.1
60°	6013.5	6054.5	6331.1	6733.1	7305.7	8079.3	8943.6	9941.9	10916.4	11713.7	12109.2
62.5°	4057.9	4086.1	4351.8	4719.2	5345.8	6091.3	7055.0	8319.1	9708.5	11132.5	12247.5
65°	2130.6	2130.6	2309.9	2567.0	3066.2	3733.9	4721.3	6017.8	7670.9	9449.2	11313.9
67.5°	1236.0	1233.8	1274.9	1333.2	1491.0	1761.0	2305.6	3258.5	4822.9	6892.9	9014.9
70°	1019.9	1013.4	1006.9	1006.9	1030.7	1071.7	1175.5	1436.9	2102.5	3554.5	5546.7
71°	974.6	970.2	952.9	946.4	957.3	978.9	1024.2	1145.2	1493.1	2424.4	4142.2
72.5°	920.6	909.7	883.7	873.0	875.1	883.7	896.7	944.3	1050.2	1378.6	2361.8
75°	838.4	812.4	780.0	765.0	758.4	756.3	756.3	769.3	793.0	831.9	968.0
77.5°	743.3	706.6	672.0	656.8	646.1	639.5	635.3	626.7	622.3	639.5	689.3
80°	628.8	589.9	561.8	553.2	546.7	533.7	516.4	499.1	488.4	496.9	527.2
82.5°	486.2	447.3	451.6	453.8	442.9	421.4	404.1	384.6	365.2	360.9	375.9
85°	386.8	367.3	354.4	382.5	358.6	332.8	309.0	276.6	231.2	190.2	207.5
87.5°	166.3	168.6	242.0	365.2	319.8	257.2	213.9	172.9	110.2	82.1	84.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7	3839.7
2.5°	3835.5	3835.5	3828.9	3824.6	3824.6	3824.6	3820.3	3822.5
5°	3861.3	3865.7	3870.0	3867.9	3874.3	3880.8	3878.6	3876.5
7.5°	3904.6	3917.5	3930.5	3937.0	3945.6	3954.3	3956.5	3949.9
10°	3947.8	3973.8	3993.2	4010.5	4021.2	4029.9	4036.4	4034.2
12.5°	4001.8	4038.5	4073.1	4107.7	4131.5	4144.4	4157.4	4153.1
15°	4090.4	4131.5	4174.7	4220.1	4256.8	4276.2	4295.7	4291.4
17.5°	4211.4	4248.1	4282.7	4328.1	4373.4	4395.1	4416.7	4414.5
20°	4362.7	4390.7	4410.2	4436.1	4479.4	4503.1	4522.6	4516.1
22.5°	4535.6	4544.2	4546.3	4555.0	4589.6	4617.6	4643.6	4650.0
25°	4723.5	4717.0	4704.0	4697.6	4721.3	4751.6	4784.0	4792.6
27.5°	4956.9	4935.3	4902.9	4876.9	4883.5	4922.3	4959.1	4967.7
30°	5250.8	5201.1	5131.9	5082.2	5073.5	5114.7	5153.5	5166.5
32.5°	5585.7	5518.7	5423.6	5348.0	5315.6	5352.3	5386.9	5406.3
35°	5983.2	5909.8	5795.3	5698.0	5646.2	5669.9	5730.5	5752.1
37.5°	6454.3	6352.7	6225.3	6102.1	6015.7	6020.0	6084.8	6110.8
40°	6975.1	6828.2	6666.1	6512.7	6387.3	6378.7	6437.0	6456.5
42.5°	7517.5	7329.4	7139.3	6938.4	6782.8	6754.6	6830.3	6832.5
45°	8100.8	7858.8	7623.3	7390.0	7227.9	7178.1	7251.7	7260.3
47.5°	8723.2	8420.6	8141.9	7889.1	7714.1	7636.3	7707.6	7720.5
50°	9371.5	9058.1	8734.0	8453.1	8247.7	8152.7	8237.0	8245.6
52.5°	10013.2	9717.1	9395.2	9073.3	8824.7	8716.7	8816.1	8846.4
55°	10659.2	10374.1	10071.6	9749.5	9436.2	9341.2	9449.2	9481.6
57.5°	11331.2	11056.9	10782.4	10458.3	10153.6	10008.9	10125.6	10170.9
60°	12072.5	11830.4	11571.1	11244.8	10944.4	10776.0	10875.3	10927.2
62.5°	12800.6	12750.9	12515.4	12176.2	11795.9	11627.3	11711.6	11748.3
65°	12861.2	13667.1	13656.3	13319.2	12787.6	12504.6	12528.4	12545.7
67.5°	11225.4	13075.1	14257.0	14362.8	13770.9	13327.8	13276.0	13286.8
70°	7947.4	10486.4	12995.1	14641.6	14875.0	14531.4	14419.1	14436.3
71°	6367.9	8997.6	11759.1	13973.9	14857.7	14758.3	14695.6	14741.0
72.5°	4064.5	6629.3	9317.3	11966.6	13662.7	14148.9	14220.2	14248.4
75°	1475.8	2852.3	4827.2	6916.8	8766.4	10039.1	10739.2	10795.4
77.5°	793.0	1022.0	1579.5	2359.6	2964.6	3288.8	3327.7	3342.8
80°	583.4	676.4	773.6	883.7	952.9	965.9	942.1	892.4
82.5°	412.8	466.8	505.6	544.5	572.6	548.8	455.9	347.9
85°	239.9	263.6	285.2	304.6	309.0	291.7	192.3	157.7
87.5°	95.0	103.7	101.6	114.6	110.2	101.6	75.6	64.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)