

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: P196145

Luminaire Tested: **NVN-AF-05-LED-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196145
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-05-LED-U-SL3
Description: NAVION ROADWAY AND AREA LUMINAIRE
(5) 70 CRI, 4000K, 1050mA 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: 30719.2 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

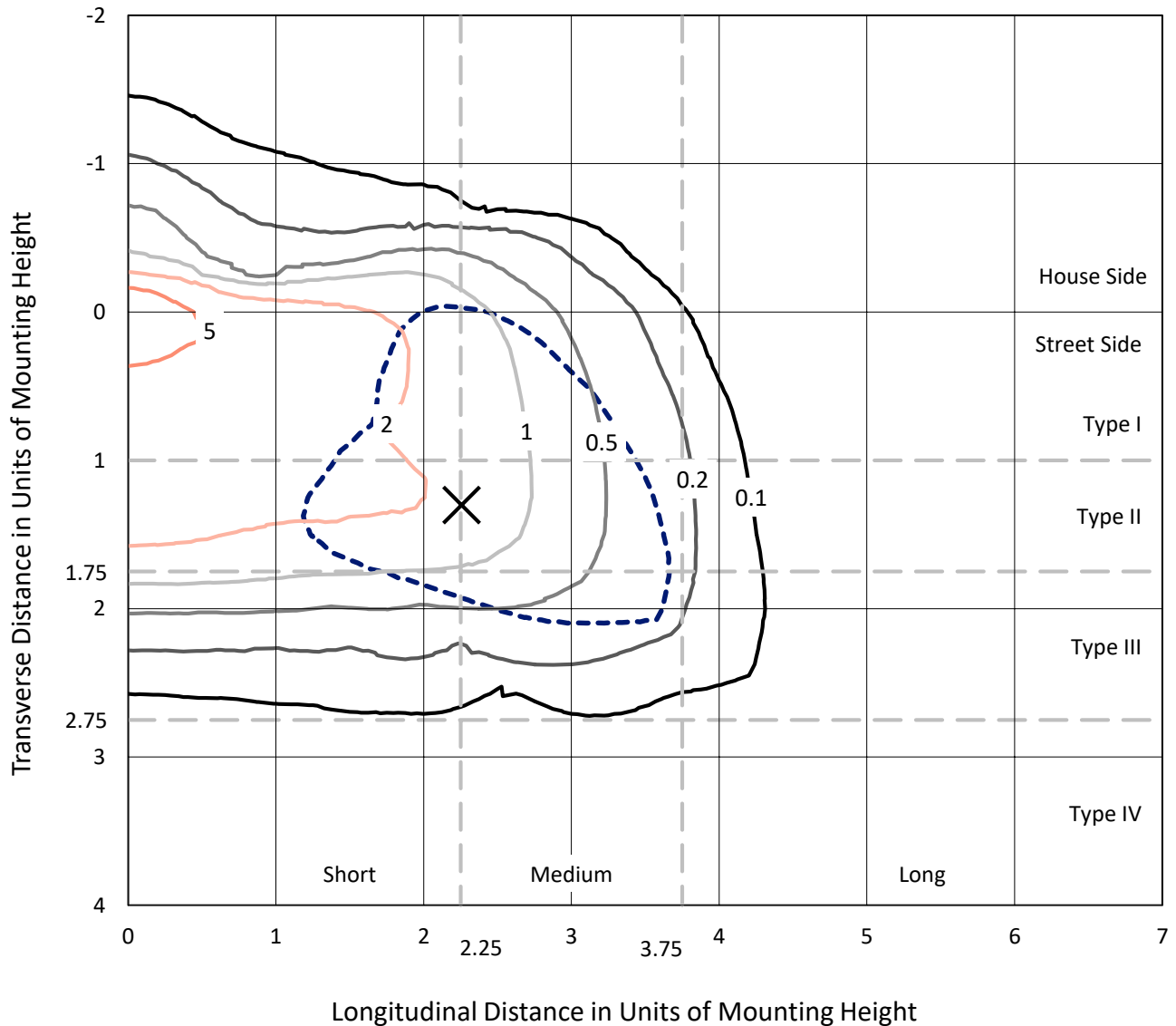
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

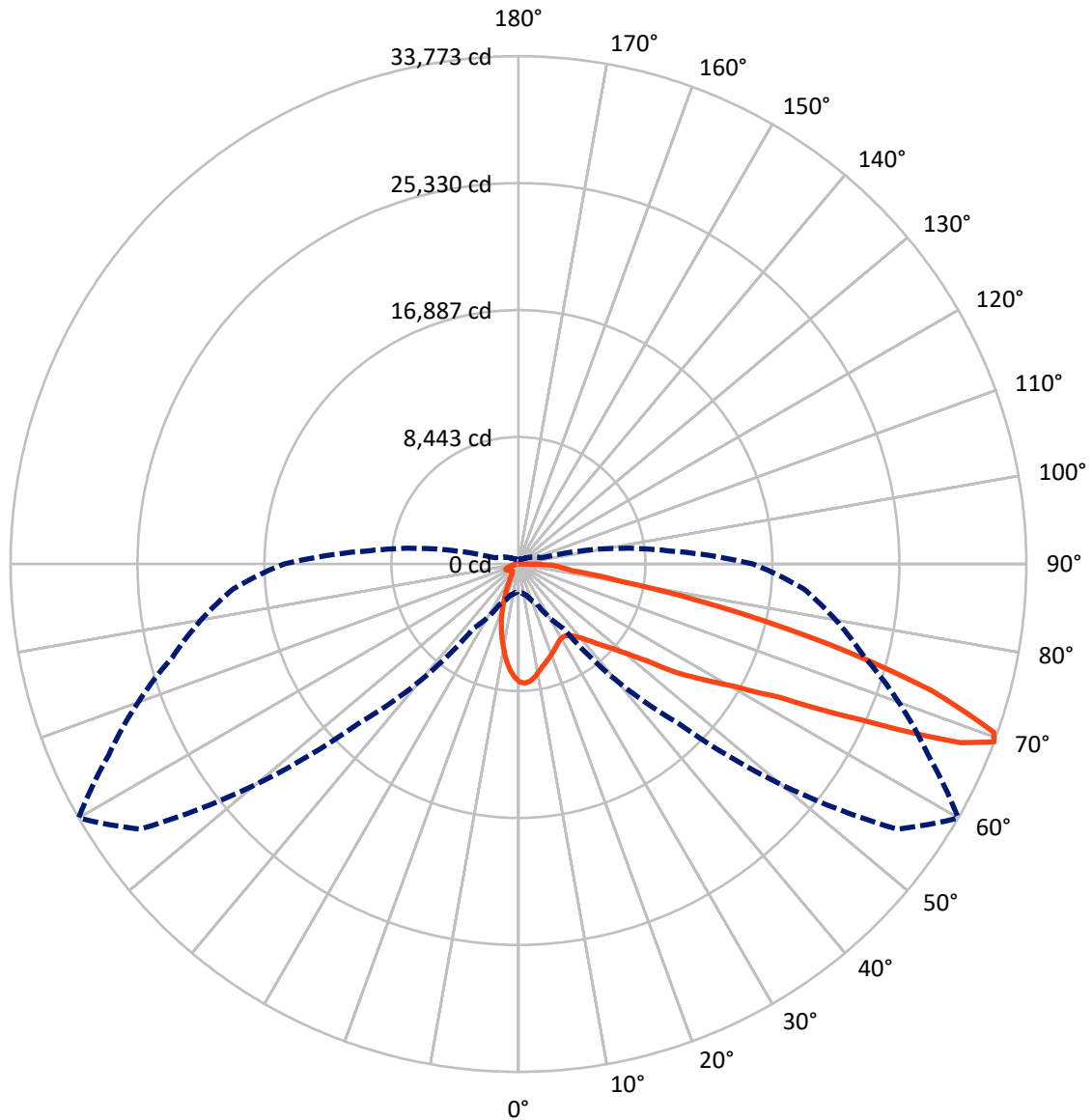
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.7 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	4381.6	0.0	4381.6
	% Fixture	14.3	0.0	14.3
Street Side	Lumens	26337.6	0.0	26337.6
	% Fixture	85.7	0.0	85.7
Total	Lumens	30719.2	0.0	30719.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	664.9	2.2
10°-20°	1423.7	4.6
20°-30°	1816.2	5.9
30°-40°	2499.3	8.1
40°-50°	4048.3	13.2
50°-60°	6353.7	20.7
60°-70°	8470.6	27.6
70°-80°	4711.6	15.3
80°-90°	730.8	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°	30719.2	100.0
0°-180°	30719.2	100.0

Coefficient of Utilization



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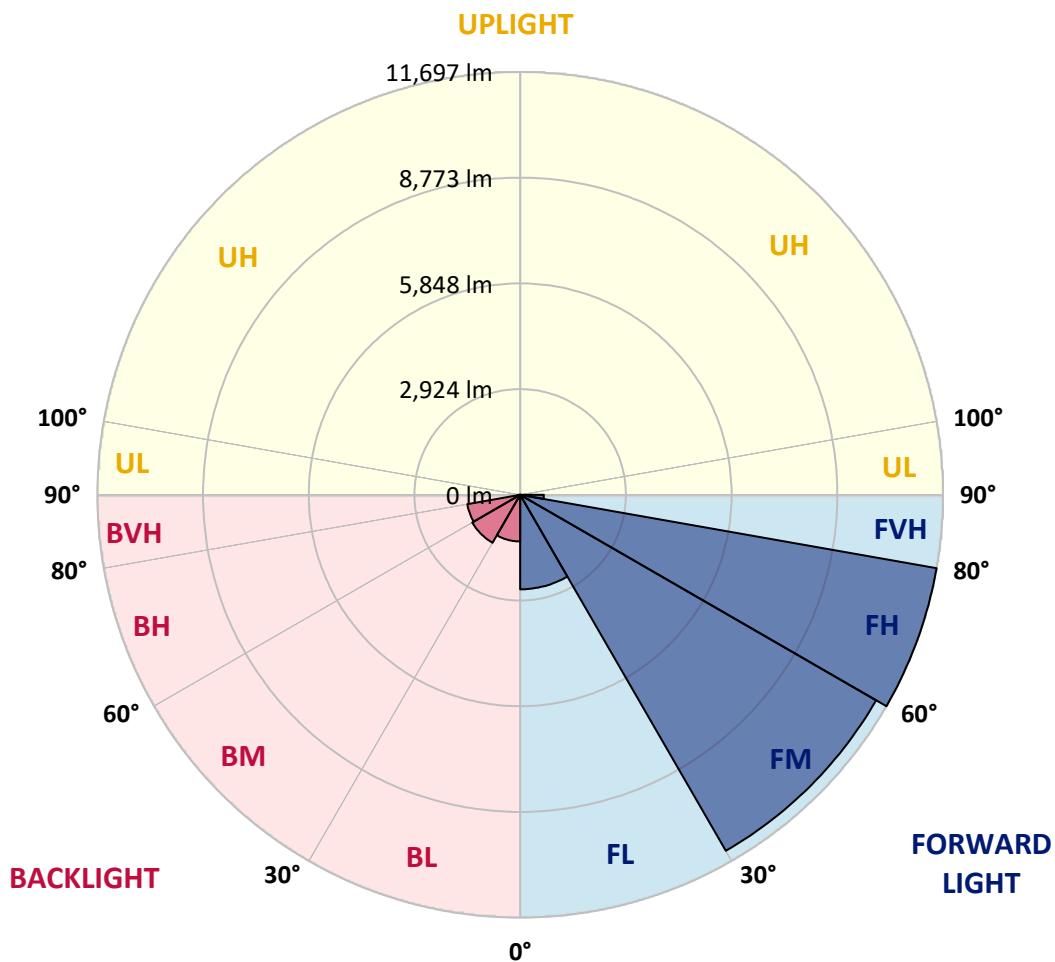
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2613.6	8.5			
FM (30°-60°)	11370.7	37.0			
FH (60°-80°)	11696.7	38.1			G4/12000
FVH (80°-90°)	656.7	2.1			G4/750
BL (0°-30°)	1291.3	4.2	B3/2500		
BM (30°-60°)	1530.7	5.0	B2/2500		
BH (60°-80°)	1485.6	4.8	B3/2500		G3/2500
BVH (80°-90°)	74.1	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1
2.5°	8046.9	8068.6	8068.6	8050.8	8041.0	7983.8	7950.4	7926.7	7885.4	7808.6	7739.6
5°	7759.3	7800.7	7818.4	7826.3	7877.5	7859.7	7861.8	7846.0	7810.5	7727.8	7615.5
7.5°	7231.3	7239.2	7270.8	7323.9	7448.1	7534.7	7605.6	7619.4	7611.6	7550.5	7392.9
10°	6711.4	6725.1	6762.5	6853.2	6971.4	7095.5	7249.1	7312.2	7359.4	7339.8	7140.8
12.5°	6279.9	6281.9	6323.3	6427.7	6559.7	6715.3	6924.0	7022.6	7134.9	7180.2	6957.6
15°	5864.3	5891.9	5931.3	6057.3	6220.9	6417.8	6658.2	6794.0	6941.8	7071.9	6815.7
17.5°	5549.1	5570.8	5594.4	5698.9	5887.9	6134.1	6431.6	6577.4	6772.4	6971.4	6669.9
20°	5375.8	5383.7	5365.9	5417.1	5576.7	5842.6	6187.3	6362.7	6595.2	6874.8	6520.3
22.5°	5340.3	5340.3	5275.4	5265.4	5336.3	5561.0	5935.3	6149.9	6433.5	6807.8	6386.3
25°	5505.8	5494.0	5371.8	5259.5	5233.9	5348.2	5694.9	5958.9	6295.6	6805.9	6285.8
27.5°	5819.0	5803.2	5651.6	5462.5	5299.0	5249.7	5509.7	5779.6	6187.3	6872.9	6234.7
30°	6209.0	6203.1	6049.4	5813.1	5543.2	5289.1	5436.9	5687.0	6114.5	6997.0	6232.6
32.5°	6636.5	6608.9	6514.4	6278.0	5927.3	5507.8	5480.2	5691.0	6094.7	7178.1	6278.0
35°	7091.5	7071.9	7048.2	6809.8	6415.8	5893.8	5671.2	5826.8	6191.3	7430.3	6406.0
37.5°	7670.7	7649.0	7688.4	7428.4	6997.0	6400.1	5994.3	6098.7	6388.3	7796.7	6644.4
40°	8700.9	8637.9	8527.5	8127.7	7674.6	7020.6	6461.2	6476.9	6725.1	8287.2	7026.5
42.5°	10393.0	10190.1	9644.5	8909.7	8389.6	7741.6	7069.8	6995.0	7190.0	8935.3	7582.0
45°	12089.1	11860.6	10938.7	9762.6	9130.3	8515.8	7822.3	7643.1	7769.2	9689.8	8297.1
47.5°	13184.3	13072.1	12031.9	10615.6	9906.5	9358.9	8683.2	8387.7	8478.3	10544.7	9179.6
50°	13505.4	13408.9	12591.4	11283.5	10639.3	10377.2	9748.9	9356.8	9372.6	11543.4	10237.4
52.5°	13265.1	13225.7	12684.0	11697.0	11312.9	11450.8	11224.3	10678.7	10548.7	12638.7	11383.9
55°	12944.0	12957.8	12749.0	12112.8	11998.5	12451.6	13154.7	12715.5	12163.9	13779.2	12577.6
57.5°	11933.4	11943.4	12490.9	12904.6	13306.4	13854.1	14657.8	14472.6	13830.4	15010.4	13915.1
60°	9609.0	9685.8	10905.2	12741.1	14801.6	16617.8	16814.8	16495.7	15603.3	16428.7	15654.5
62.5°	6865.0	6934.0	8346.4	11060.8	14626.3	19745.9	20797.8	19529.3	18008.5	18550.3	18101.1
65°	3606.8	3595.1	4688.3	7643.1	12319.6	20470.9	27073.8	24914.9	22060.5	21467.6	20464.9
67.5°	2015.2	2080.2	2503.7	3855.0	8029.1	18016.4	31082.6	31718.8	27694.3	23782.2	20362.6
69°	1863.5	1885.2	2168.9	2980.4	5233.9	14864.6	30737.8	33773.3	30070.0	23792.1	19050.6
70°	1810.3	1833.9	2092.0	2746.0	4396.7	12179.7	29483.0	33533.0	30647.2	23264.2	17856.8
72.5°	1623.2	1654.7	1904.8	2468.3	3705.3	6278.0	23748.7	28700.9	27761.4	20333.0	13846.2
75°	1384.8	1438.0	1816.2	2450.5	3510.3	3990.9	15837.7	21382.9	20662.0	14541.6	7855.9
77.5°	573.3	579.1	793.8	1794.6	3683.6	3819.6	8511.8	13544.8	11990.6	6376.5	2365.8
80°	399.9	392.0	396.0	524.0	2972.5	3845.2	4367.2	6888.7	5354.1	1682.2	1107.0
82.5°	336.9	332.9	348.6	329.0	1006.6	4363.3	3652.1	3591.1	2521.5	906.1	527.9
85°	222.6	216.7	285.6	299.4	478.6	3465.0	3927.9	2822.8	1879.3	484.6	224.5
87.5°	108.3	110.3	163.5	202.9	254.1	1097.2	3762.4	2231.9	1451.8	210.7	90.6
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°	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1	7838.1
2.5°	7712.0	7652.9	7599.7	7532.8	7481.6	7438.2	7379.2	7377.1	7367.3	7381.1	7385.0
5°	7540.7	7442.2	7292.4	7125.1	7006.8	6851.2	6699.5	6648.3	6591.2	6585.2	6603.0
7.5°	7282.6	7128.9	6872.9	6616.8	6360.7	6098.7	5850.5	5724.4	5602.3	5564.9	5582.7
10°	6995.0	6800.0	6408.0	5990.4	5629.9	5239.9	4861.7	4617.4	4394.8	4300.2	4323.9
12.5°	6770.4	6522.2	5970.7	5429.0	4889.2	4329.7	3831.4	3348.7	2984.4	2820.9	2830.7
15°	6577.4	6260.3	5561.0	4840.0	4164.3	3398.0	2706.6	2147.2	1828.0	1709.9	1705.9
17.5°	6368.6	5984.5	5133.5	4292.3	3415.7	2468.3	1812.3	1481.3	1355.3	1315.8	1315.8
20°	6146.0	5700.8	4686.3	3695.5	2627.8	1723.7	1363.2	1235.1	1187.9	1176.0	1174.0
22.5°	5939.2	5423.1	4237.2	3059.2	1900.9	1307.9	1160.2	1111.0	1103.2	1113.0	1113.0
25°	5775.7	5178.8	3782.2	2389.4	1382.8	1095.3	1032.3	1026.3	1055.9	1091.3	1097.2
27.5°	5653.5	4960.1	3333.0	1745.3	1087.4	953.4	931.7	957.4	1026.3	1097.2	1111.0
30°	5568.8	4773.0	2795.2	1254.9	906.1	835.2	845.1	890.4	994.8	1103.2	1132.7
32.5°	5531.4	4621.3	2253.6	963.3	774.2	734.8	760.4	819.5	927.8	1036.1	1071.6
35°	5566.8	4511.0	1753.1	799.7	677.6	648.0	677.6	738.7	809.7	862.8	884.4
37.5°	5694.9	4471.6	1319.8	709.1	614.6	585.0	608.7	650.1	681.6	701.2	711.2
40°	5964.7	4513.0	1034.2	661.8	579.1	545.6	551.6	571.2	592.9	608.7	610.7
42.5°	6394.2	4648.9	919.9	644.2	557.5	514.1	504.3	518.1	541.8	563.3	567.3
45°	6965.5	4875.4	908.1	650.1	547.6	488.6	468.8	482.6	514.1	549.6	555.5
47.5°	7704.1	5233.9	963.3	681.6	553.5	474.8	445.2	459.0	500.3	547.6	555.5
50°	8578.8	5730.4	1065.7	728.9	581.1	474.8	435.4	447.1	490.5	543.7	551.6
52.5°	9609.0	6421.8	1172.1	776.1	620.5	492.4	439.3	437.3	476.7	526.0	535.8
55°	10745.6	7280.6	1274.5	817.5	642.2	516.1	449.2	425.4	457.1	496.4	504.3
57.5°	12083.2	8456.6	1453.7	856.9	654.0	533.9	460.9	413.7	431.4	459.0	464.9
60°	13897.4	10184.2	1802.4	923.8	675.7	541.8	462.9	401.8	399.9	419.6	421.6
62.5°	16263.2	12207.3	2135.3	1002.7	719.0	543.7	455.0	393.9	374.3	380.2	380.2
65°	17945.5	12951.9	2038.8	1069.6	758.4	541.8	447.1	388.1	354.6	344.7	344.7
67.5°	16988.1	11441.0	1731.5	1087.4	762.3	520.1	429.4	374.3	336.9	313.2	313.2
69°	15581.7	10028.6	1589.7	1055.9	730.8	494.4	409.7	360.5	325.0	297.5	297.5
70°	14435.2	8959.0	1503.0	1018.4	693.4	472.8	392.0	346.7	313.2	289.6	287.6
72.5°	10777.2	5978.5	1284.3	878.5	569.3	399.9	342.8	309.2	281.7	266.0	266.0
75°	5687.0	2996.1	1051.9	717.0	439.3	319.2	281.7	260.0	244.3	242.3	240.3
77.5°	1863.5	1355.3	756.5	539.7	323.0	248.2	224.5	210.7	208.8	216.7	216.7
80°	1006.6	809.7	486.5	364.4	224.5	185.2	173.4	171.3	177.3	189.1	189.1
82.5°	488.6	399.9	289.6	224.5	153.6	136.0	136.0	137.9	145.8	159.6	159.6
85°	210.7	189.1	167.5	126.0	94.5	84.7	96.6	106.4	112.3	122.1	126.0
87.5°	100.5	88.7	76.8	49.2	41.3	43.4	51.2	63.0	74.9	82.8	84.7
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)