

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: LUMARK

Report Number: P884666

Luminaire Tested: **NAV-SB5C-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24281 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

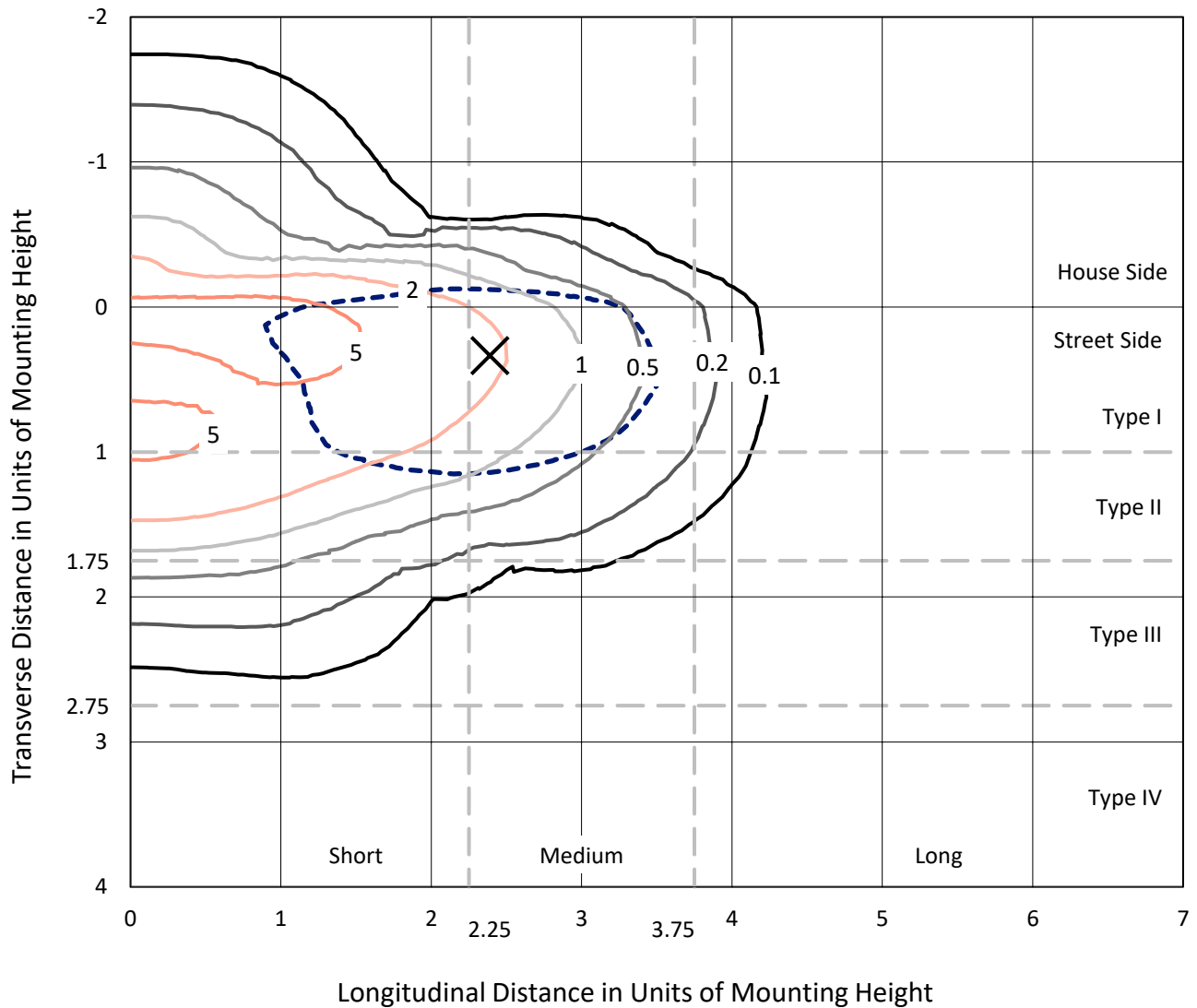
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

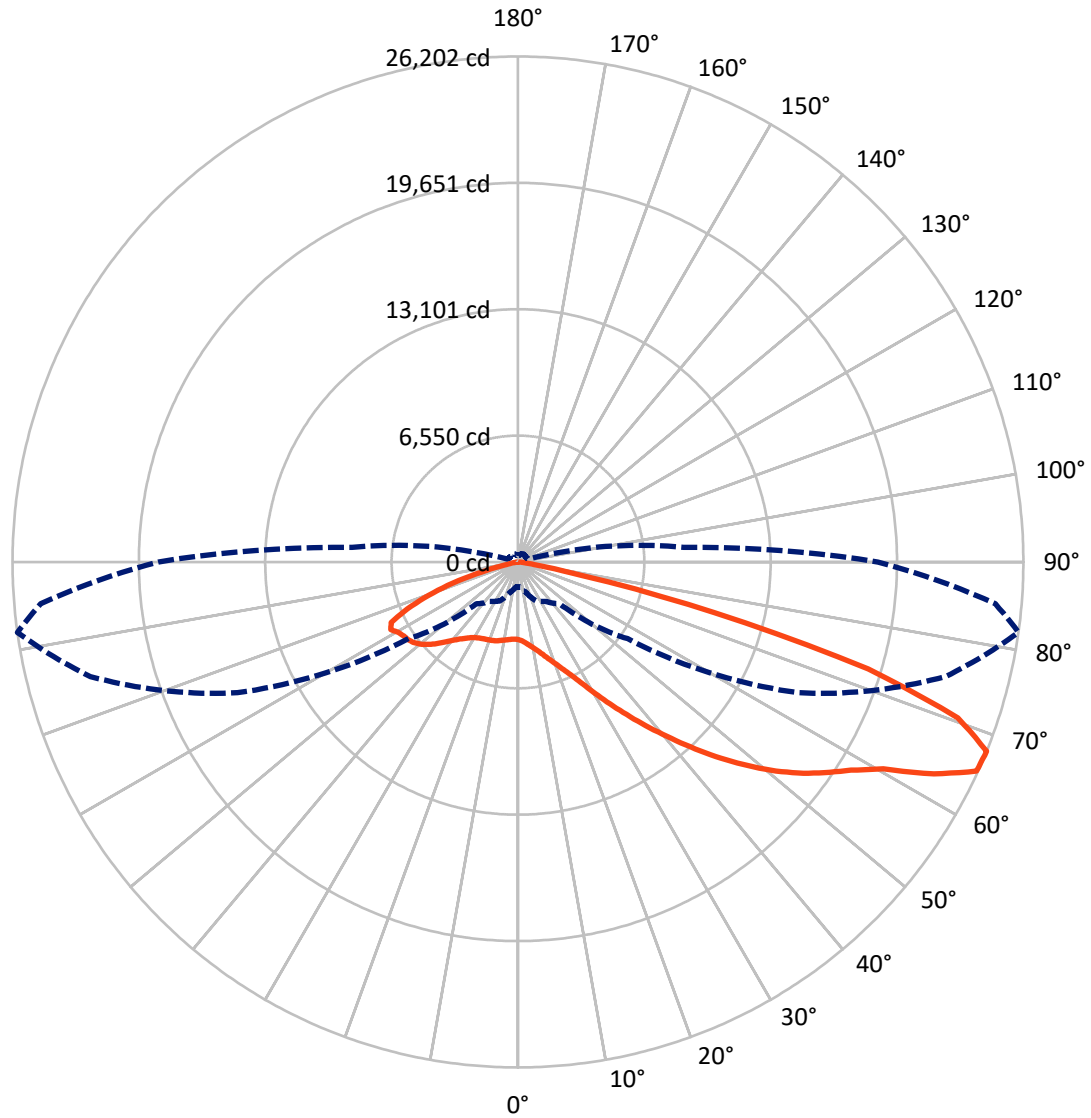
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4398.3	0.0	4398.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	19882.7	0.0	19882.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	24281.0	0.0	24281.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.4	1.5
10°-20°	931.3	3.8
20°-30°	1491.6	6.1
30°-40°	2637.6	10.9
40°-50°	4621.4	19.0
50°-60°	6163.6	25.4
60°-70°	5738.0	23.6
70°-80°	2202.3	9.1
80°-90°	136.8	0.6
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°	24281.0	100.0
0°-180°	24281.0	100.0

Coefficient of Utilization



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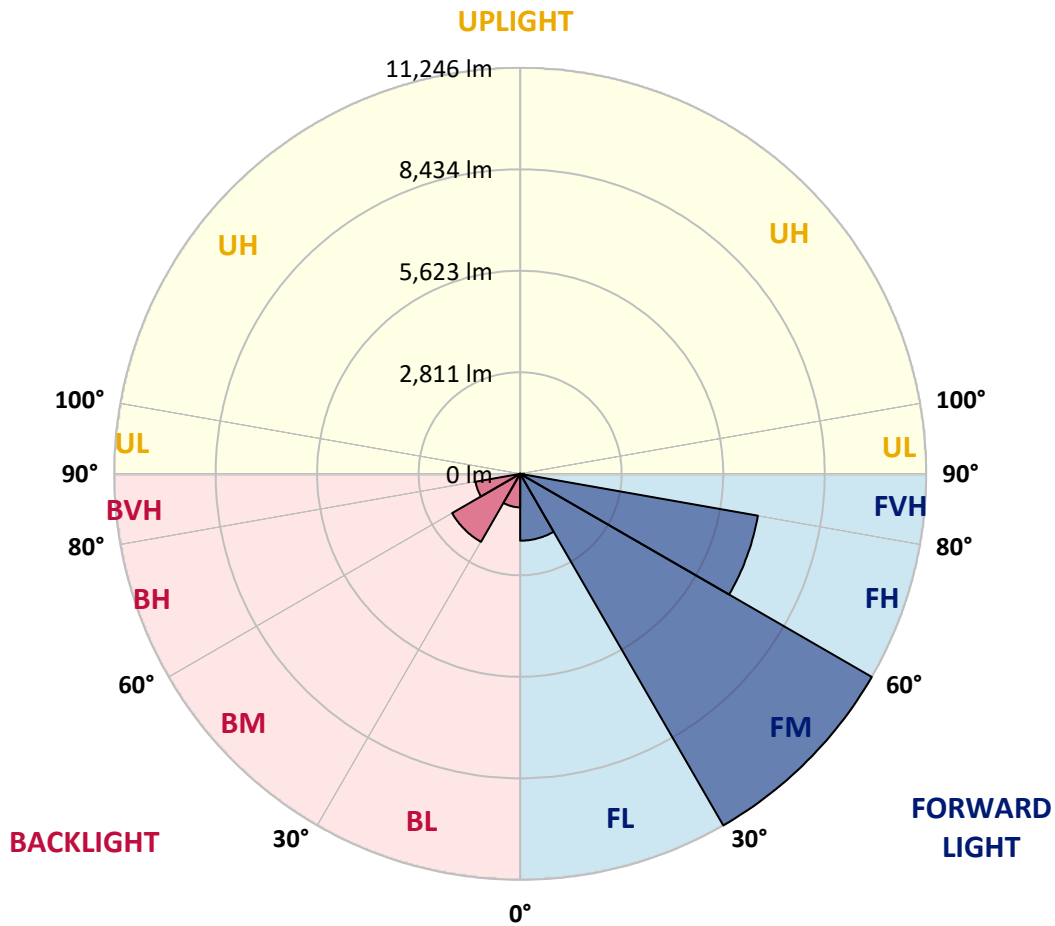
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1852.4	7.6			
FM (30°-60°)	11246.0	46.3			
FH (60°-80°)	6684.9	27.5			G3/7500
FVH (80°-90°)	99.4	0.4			G1/100
BL (0°-30°)	928.9	3.8	B2/1000		
BM (30°-60°)	2176.7	9.0	B2/2500		
BH (60°-80°)	1255.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	37.3	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5
2.5°	4251.6	4276.0	4262.0	4255.0	4242.8	4225.3	4211.3	4167.6	4122.2	4092.5	4082.0
5°	4337.2	4361.7	4359.9	4366.9	4375.7	4380.9	4377.4	4328.5	4263.8	4213.1	4183.4
7.5°	4263.8	4291.8	4314.5	4349.4	4410.6	4475.3	4506.8	4496.3	4429.9	4359.9	4323.2
10°	4055.8	4085.5	4139.7	4221.8	4351.2	4491.0	4608.2	4662.4	4620.4	4543.5	4492.8
12.5°	3674.7	3704.4	3811.0	3989.3	4206.1	4449.1	4672.9	4818.0	4828.4	4751.5	4692.1
15°	3246.4	3276.1	3389.7	3613.5	3943.9	4333.7	4707.8	4982.3	5074.9	5008.5	4936.8
17.5°	2980.6	3006.9	3092.5	3272.6	3617.0	4103.0	4695.6	5157.1	5368.6	5316.2	5230.5
20°	2900.2	2922.9	2963.1	3089.0	3375.7	3863.5	4615.2	5321.4	5685.1	5655.3	5559.2
22.5°	2985.9	3006.9	3019.1	3075.0	3255.1	3706.1	4513.8	5489.3	6052.2	6055.7	5938.5
25°	3183.4	3204.4	3190.4	3225.4	3304.0	3657.2	4475.3	5686.8	6513.7	6552.1	6419.3
27.5°	3508.6	3510.3	3477.1	3475.4	3487.6	3730.6	4515.5	5898.3	7095.8	7167.5	7003.2
30°	4160.6	4134.4	4006.8	3868.7	3805.8	3950.9	4627.4	6148.3	7782.9	7910.5	7704.2
32.5°	5165.8	5127.4	4893.1	4562.7	4230.6	4305.7	4828.4	6433.3	8531.1	8761.8	8510.1
35°	6256.7	6246.2	6001.5	5510.2	4929.8	4811.0	5155.4	6807.4	9347.5	9714.6	9415.6
37.5°	7270.6	7265.4	7125.5	6546.9	5840.6	5515.5	5679.8	7296.9	10221.6	10753.0	10399.9
40°	8197.2	8212.9	8073.1	7555.6	6844.1	6419.3	6393.1	7901.7	11193.5	11884.1	11464.5
42.5°	8997.8	9015.3	8873.7	8490.9	7835.3	7419.2	7268.9	8643.0	12142.8	13099.0	12602.6
45°	9541.5	9649.9	9628.9	9323.0	8852.7	8420.9	8321.3	9573.0	13224.9	14387.4	13805.3
47.5°	9695.4	9795.0	9952.3	9994.3	9707.6	9282.8	9401.7	10693.6	14319.3	15677.6	15015.0
50°	9316.0	9408.7	9735.6	10170.9	10370.1	10239.0	10452.3	11894.6	15439.8	16964.2	16202.0
52.5°	8567.8	8662.2	9074.8	9763.5	10576.4	10989.0	11506.5	13078.1	16525.5	18182.7	17326.1
55°	7485.7	7585.3	8115.0	8894.7	10183.1	11298.4	12385.8	14259.8	17520.2	19278.8	18340.1
57.5°	6013.7	6087.1	6637.8	7728.7	9193.6	10990.7	13034.4	15550.0	18457.2	20355.7	19345.3
60°	3919.4	3984.1	4623.9	5840.6	7553.8	9962.8	13163.7	16988.7	19701.9	21756.0	20700.1
62.5°	2606.5	2650.2	3029.6	3922.9	5319.7	7989.1	12406.8	18137.3	21527.0	24192.9	23023.4
65°	1788.4	1832.1	2211.4	2833.8	3436.9	5284.7	10230.3	17985.2	23180.7	26128.2	24745.4
67.5°	1276.2	1312.9	1634.5	2221.9	2487.6	3069.8	6935.0	16041.2	22943.0	26201.6	24838.0
70°	914.3	935.3	1201.0	1730.7	1977.2	1844.3	3856.5	12268.7	20088.2	24194.7	22946.5
72.5°	639.8	646.8	833.9	1318.1	1592.6	1346.1	1835.6	8179.7	15193.3	18990.4	17789.4
75°	433.5	442.3	561.2	966.7	1277.9	1027.9	972.0	4386.2	8919.2	10511.7	9422.6
77.5°	265.7	269.2	361.9	660.8	956.2	783.2	625.8	1858.3	3450.9	3388.0	2888.0
80°	150.3	150.3	230.8	410.8	652.1	505.2	438.8	790.2	1092.6	959.7	846.1
82.5°	83.9	85.7	167.8	255.2	431.8	298.9	241.2	365.4	472.0	417.8	363.6
85°	35.0	38.5	103.1	120.6	206.3	148.6	97.9	153.8	174.8	155.6	113.6
87.5°	3.5	5.2	31.5	22.7	24.5	29.7	14.0	29.7	24.5	24.5	17.5
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°	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5	4022.5
2.5°	4048.8	4022.5	3956.1	3879.2	3777.8	3728.8	3662.4	3617.0	3578.5	3582.0	3547.0
5°	4127.4	4061.0	3912.4	3727.1	3496.3	3332.0	3157.2	3036.6	2938.7	2917.7	2870.5
7.5°	4235.8	4130.9	3870.4	3536.5	3146.7	2851.3	2587.3	2417.7	2297.1	2258.6	2220.2
10°	4375.7	4223.6	3816.3	3297.0	2735.9	2360.0	2076.8	1944.0	1861.8	1833.8	1812.9
12.5°	4538.3	4330.2	3744.6	3005.1	2312.8	1951.0	1770.9	1704.5	1678.2	1669.5	1664.3
15°	4742.8	4463.1	3636.2	2659.0	1954.5	1701.0	1624.1	1615.3	1618.8	1615.3	1613.6
17.5°	4985.8	4608.2	3459.6	2302.3	1713.2	1573.4	1545.4	1552.4	1561.1	1559.4	1555.9
20°	5251.5	4751.5	3234.1	1985.9	1548.9	1482.4	1466.7	1473.7	1480.7	1477.2	1475.5
22.5°	5553.9	4905.4	2984.1	1739.4	1438.7	1398.5	1381.1	1382.8	1382.8	1375.8	1372.3
25°	5915.8	5074.9	2721.9	1564.6	1354.8	1323.4	1302.4	1295.4	1284.9	1263.9	1260.4
27.5°	6347.6	5255.0	2470.2	1442.2	1288.4	1258.7	1234.2	1216.7	1190.5	1155.5	1152.0
30°	6833.6	5473.5	2256.9	1365.3	1236.0	1206.2	1178.3	1152.0	1113.6	1069.9	1066.4
32.5°	7405.2	5707.8	2101.3	1314.6	1188.8	1157.3	1124.1	1092.6	1050.7	1006.9	1008.7
35°	8087.0	5991.0	2010.4	1279.7	1152.0	1110.1	1073.4	1038.4	1006.9	968.5	965.0
37.5°	8826.5	6291.7	1982.4	1262.2	1127.6	1062.9	1020.9	996.5	993.0	970.2	968.5
40°	9635.9	6648.3	2003.4	1251.7	1101.3	1017.4	972.0	966.7	975.5	935.3	937.0
42.5°	10492.5	7071.3	2038.4	1239.5	1064.6	972.0	928.3	928.3	921.3	865.3	865.3
45°	11419.0	7559.1	2073.3	1209.7	1020.9	926.5	893.3	881.1	851.4	797.2	795.4
47.5°	12352.6	8055.6	2099.6	1155.5	968.5	888.1	858.4	830.4	786.7	737.7	736.0
50°	13238.9	8501.4	2071.6	1075.1	909.0	851.4	819.9	781.4	734.2	701.0	695.8
52.5°	14030.8	8887.7	1952.7	980.7	846.1	812.9	784.9	744.7	706.3	671.3	667.8
55°	14719.6	9200.6	1742.9	891.6	790.2	779.7	751.7	701.0	648.6	618.9	615.4
57.5°	15380.4	9438.4	1480.7	818.1	739.5	743.0	701.0	655.6	606.6	575.1	571.7
60°	16259.7	9756.5	1215.0	750.0	685.3	695.8	650.3	617.1	555.9	515.7	510.5
62.5°	17665.3	10251.3	965.0	666.1	622.3	625.8	606.6	566.4	493.0	445.8	442.3
65°	18780.6	10069.5	760.5	575.1	550.7	555.9	555.9	512.2	433.5	379.4	374.1
67.5°	18654.7	8622.0	606.6	486.0	482.5	486.0	498.2	461.5	384.6	340.9	333.9
70°	17184.5	6858.1	486.0	403.8	419.6	410.8	445.8	421.3	346.1	302.4	297.2
72.5°	14022.1	4940.3	370.6	333.9	321.7	335.6	402.1	379.4	288.4	239.5	234.3
75°	8193.7	2636.2	276.2	264.0	232.5	279.7	356.6	323.4	220.3	176.6	171.3
77.5°	2667.7	919.5	202.8	194.0	173.1	225.5	304.2	272.7	180.1	139.9	134.6
80°	715.0	278.0	138.1	127.6	111.9	167.8	241.2	216.8	129.4	90.9	89.2
82.5°	286.7	117.1	80.4	71.7	61.2	115.4	190.6	174.8	96.1	57.7	57.7
85°	92.7	38.5	29.7	22.7	28.0	71.7	113.6	118.9	68.2	29.7	22.7
87.5°	12.2	5.2	5.2	7.0	5.2	12.2	35.0	33.2	19.2	3.5	0.0
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)