

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: P971575

Luminaire Tested: **NAV-SB6D-830-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-830-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57887.9 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 440.1
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: 24 FT

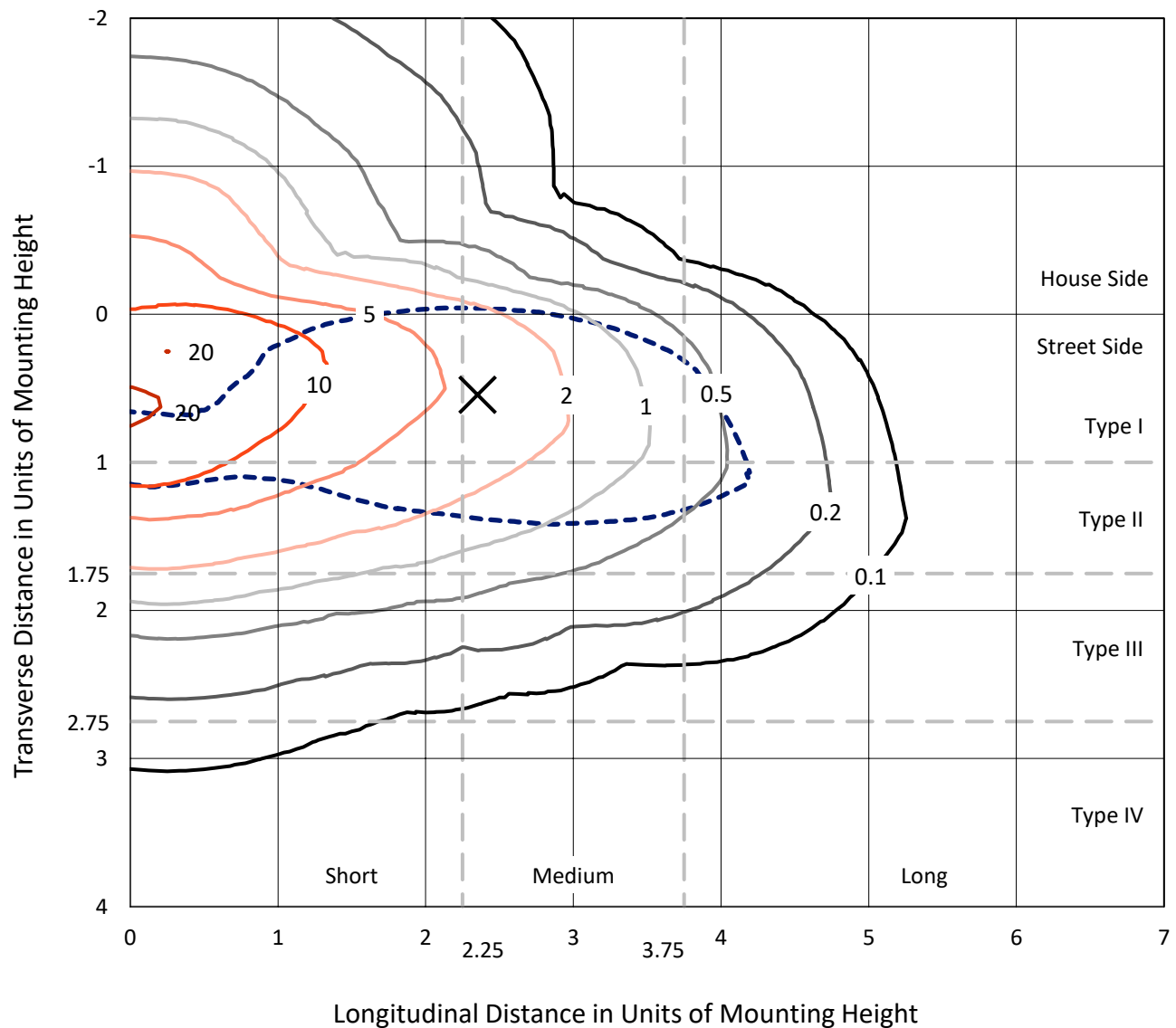


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Iso-Footcandle Lines of Horizontal Illumination

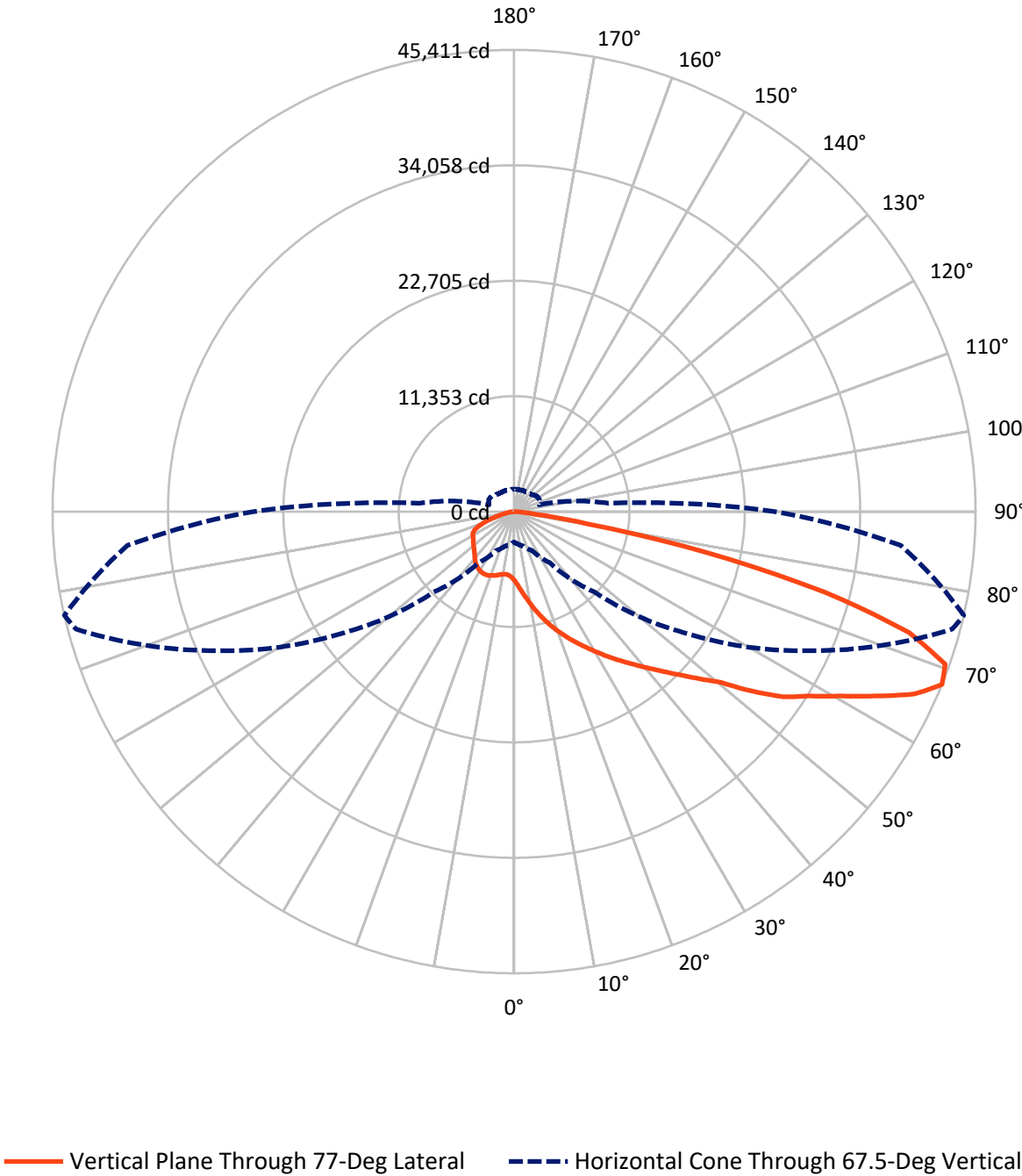
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10950.1	0.0	10950.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	46937.8	0.0	46937.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	57887.9	0.0	57887.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	728.0	1.3
10°-20°	2615.5	4.5
20°-30°	4938.3	8.5
30°-40°	7955.5	13.7
40°-50°	10881.6	18.8
50°-60°	12274.5	21.2
60°-70°	11456.8	19.8
70°-80°	6280.2	10.8
80°-90°	757.5	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°-90°	57887.9	100.0
0°-180°	57887.9	100.0

Coefficient of Utilization



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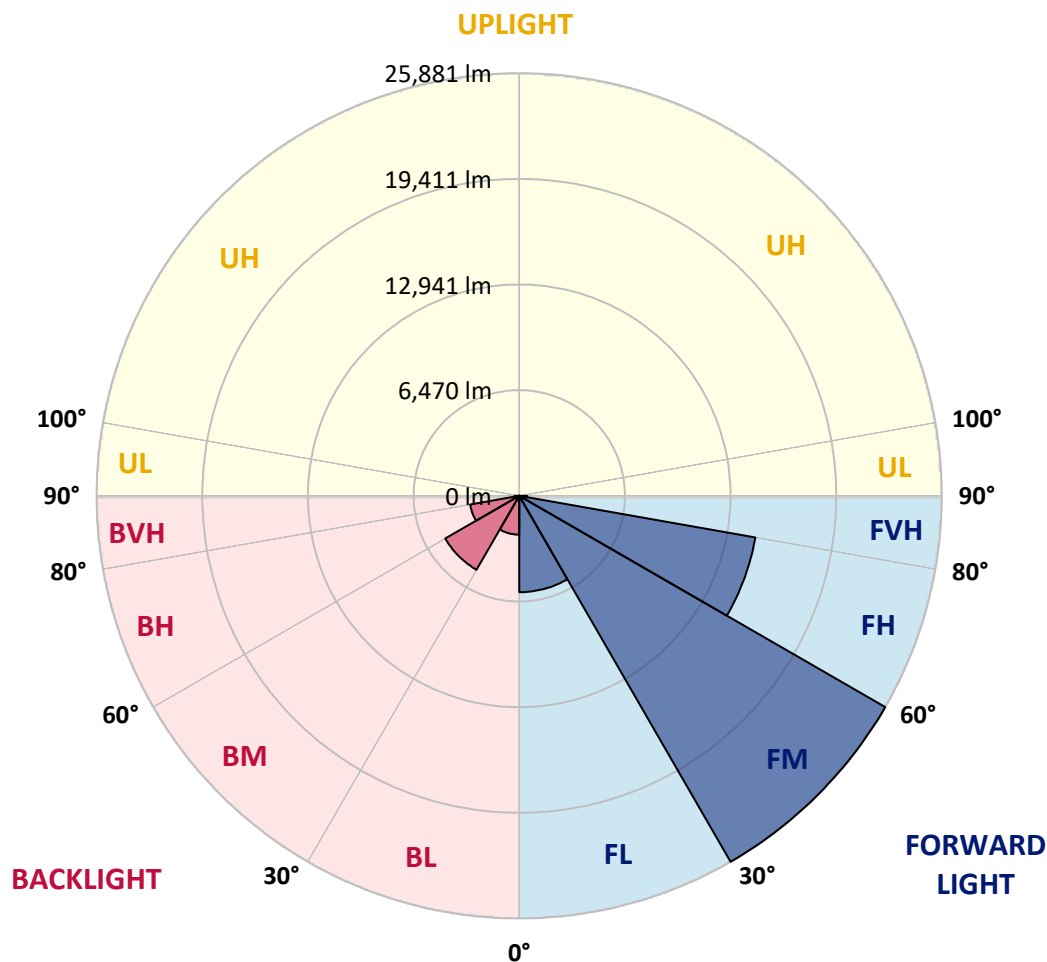
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5900.9	10.2			
FM	(30°-60°)	25881.0	44.7			
FH	(60°-80°)	14682.1	25.4			G5
FVH	(80°-90°)	473.7	0.8			G3/500
BL	(0°-30°)	2380.8	4.1	B3/2500		
BM	(30°-60°)	5230.6	9.0	B4/8500		
BH	(60°-80°)	3054.9	5.3	B4/5000		G4/5000
BVH	(80°-90°)	283.8	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1
2.5°	8504.2	8564.0	8489.4	8489.4	8238.3	8106.8	7855.8	7664.5	7321.0	7261.2	7034.1
5°	10052.1	10126.8	10022.2	9977.5	9681.5	9409.7	8988.3	8573.0	7960.5	7897.6	7362.8
7.5°	11250.4	11345.9	11253.4	11205.5	10942.6	10637.8	10144.7	9565.1	8701.4	8578.9	7805.1
10°	12227.4	12242.4	12212.6	12230.5	12024.3	11773.3	11268.3	10593.0	9514.3	9346.9	8339.9
12.5°	12780.3	12849.0	12908.7	13016.4	12980.5	12825.1	12370.9	11564.2	10374.8	10159.7	8922.6
15°	13040.3	13159.8	13294.2	13542.3	13742.5	13781.3	13434.7	12607.0	11250.4	10990.4	9511.3
17.5°	13132.9	13246.5	13458.6	13817.2	14247.5	14537.3	14382.0	13620.0	12116.9	11818.1	10129.8
20°	13602.1	13634.9	13763.4	14104.0	14570.2	15051.3	15167.8	14594.1	12974.6	12636.8	10769.3
22.5°	14606.0	14540.3	14576.1	14731.5	15066.2	15532.3	15798.3	15454.6	13856.1	13467.6	11414.7
25°	16264.5	16073.2	15882.0	15702.7	15873.0	16136.0	16437.8	16315.2	14779.4	14286.3	12066.1
27.5°	18359.2	18126.1	17704.7	17116.1	16909.9	17002.5	17137.0	17113.1	15633.9	15134.9	12738.5
30°	20421.0	20149.0	19647.0	18795.4	18251.6	18006.6	17904.9	17836.2	16563.3	16031.4	13416.7
32.5°	22067.4	21852.3	21359.3	20406.0	19617.2	19198.9	18861.1	18616.2	17534.5	17002.5	14133.9
35°	23507.8	23307.5	22742.8	21702.8	20845.3	20400.1	19957.8	19434.9	18544.4	18006.6	14904.8
37.5°	24822.5	24622.3	23848.4	22766.7	21903.1	21595.3	21200.9	20313.3	19557.4	19049.4	15720.6
40°	25653.2	25608.4	24885.3	23660.1	22763.7	22611.3	22479.8	21332.4	20680.9	20208.8	16617.1
42.5°	25865.4	25964.0	25390.3	24383.2	23528.7	23406.1	23713.9	22485.7	21942.0	21490.8	17633.1
45°	25354.4	25638.2	25261.7	24577.4	24072.4	24006.7	24807.6	23746.8	23337.4	22925.0	18858.2
47.5°	24060.5	24541.6	24386.2	24290.7	24218.9	24502.7	25769.7	25085.4	24918.2	24559.5	20256.7
50°	21448.8	22360.3	22632.2	23235.8	23929.0	24888.2	26645.3	26546.7	26764.8	26403.3	21959.9
52.5°	16933.8	18188.8	19766.6	21278.6	23038.6	24759.8	27607.5	28644.3	29564.7	29367.5	24667.1
55°	13978.5	14543.3	15756.5	18529.4	21311.4	24218.9	28040.7	30338.6	32343.7	32167.4	26720.0
57.5°	11707.6	12212.6	12959.6	15275.4	18699.8	22990.7	28309.7	31372.5	34247.1	34229.2	28745.9
60°	9272.3	9807.1	10572.1	12212.6	15648.9	20869.2	28249.9	32549.8	36676.4	36825.9	31217.1
62.5°	6523.1	7111.8	7960.5	9490.4	12532.3	18120.1	27030.8	33401.5	39536.1	39942.5	34190.3
65°	4288.0	4676.5	5316.0	6636.7	9338.0	14585.1	24703.0	33512.1	42596.0	43283.3	36981.3
67.5°	3006.1	3155.5	3531.9	4249.1	6155.5	11184.6	20994.7	32367.6	44636.9	45410.8	38191.5
70°	2345.7	2420.4	2611.6	2898.5	3866.6	7521.1	16088.2	29391.4	44200.6	45007.4	36927.5
72.5°	2025.9	2097.7	2169.4	2205.3	2593.7	4643.6	10897.8	24574.5	40092.0	40638.8	32107.6
75°	1837.7	1855.7	1915.4	1903.4	1978.1	3012.1	6290.0	17904.9	31632.5	31444.2	23702.0
77.5°	1544.9	1568.8	1667.4	1652.4	1757.1	2058.8	3266.1	11555.1	20507.6	19228.7	13192.7
80°	1308.8	1320.7	1428.3	1410.4	1526.9	1491.1	1667.4	5889.6	8698.5	7368.7	3803.9
82.5°	454.2	561.8	1090.7	1123.5	1165.4	902.4	962.2	2402.5	2656.5	2034.9	797.9
85°	221.1	236.1	555.8	788.8	785.9	454.2	469.1	857.6	836.7	657.4	266.0
87.5°	35.9	44.8	65.7	307.8	245.1	119.5	161.3	167.4	173.3	149.4	59.8
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°	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1	6792.1
2.5°	6866.8	6717.3	6403.6	6113.7	5886.7	5668.6	5546.0	5441.4	5381.7	5369.7	5369.7
5°	7052.0	6744.2	6173.5	5692.4	5378.7	5145.6	5023.1	4945.4	4906.6	4882.6	4879.6
7.5°	7318.0	6866.8	6054.0	5507.1	5178.4	5011.1	4948.4	4936.4	4933.4	4936.4	4945.4
10°	7685.6	7067.0	6042.1	5462.3	5187.4	5094.8	5091.8	5094.8	5106.8	5109.7	5112.7
12.5°	8082.9	7273.1	6089.8	5501.2	5301.0	5250.2	5241.2	5238.3	5247.2	5253.1	5256.1
15°	8516.2	7545.0	6170.5	5584.8	5426.5	5372.6	5363.7	5345.8	5342.8	5339.8	5336.9
17.5°	8961.5	7814.0	6260.2	5674.5	5507.1	5432.4	5399.6	5357.8	5324.9	5316.0	5324.9
20°	9412.7	8080.0	6322.9	5719.3	5513.2	5408.5	5342.8	5271.1	5214.3	5181.5	5193.4
22.5°	9893.7	8357.8	6361.8	5707.3	5459.4	5316.0	5196.3	5112.7	5026.1	4969.3	4972.3
25°	10362.9	8599.9	6358.8	5644.6	5354.7	5172.5	5020.0	4912.5	4793.0	4733.2	4733.2
27.5°	10814.1	8818.0	6284.1	5534.1	5205.4	5002.1	4819.9	4691.4	4574.9	4518.1	4515.1
30°	11280.2	9000.3	6167.5	5372.6	5029.1	4804.9	4604.7	4494.2	4389.6	4335.8	4332.8
32.5°	11743.4	9167.6	6003.2	5172.5	4825.8	4610.7	4413.4	4311.9	4249.1	4249.1	4252.1
35°	12233.5	9284.1	5785.0	4939.4	4610.7	4404.5	4249.1	4189.4	4183.4	4147.6	4138.5
37.5°	12750.4	9358.9	5519.1	4700.3	4398.6	4204.3	4156.5	4084.8	4025.1	3947.4	3935.4
40°	13294.2	9433.6	5199.4	4452.3	4174.4	4066.9	4046.0	3950.3	3780.0	3588.7	3561.9
42.5°	13954.7	9484.3	4867.7	4204.3	3938.4	3902.5	3932.4	3768.0	3496.2	3352.7	3355.6
45°	14719.6	9568.1	4562.9	3959.3	3696.4	3696.4	3821.8	3606.7	3382.6	3292.9	3307.9
47.5°	15711.6	9762.3	4279.1	3690.3	3472.2	3531.9	3576.8	3412.4	3287.0	3176.4	3173.4
50°	17146.0	10228.4	3986.2	3418.5	3301.9	3421.4	3358.7	3263.1	3116.6	3027.0	3018.0
52.5°	18926.9	10503.3	3726.2	3173.4	3155.5	3275.0	3185.4	3095.7	2985.1	2865.6	2841.7
55°	20140.1	10554.1	3508.1	2994.1	3056.9	3045.0	3012.1	2931.4	2871.6	2713.3	2716.2
57.5°	21496.7	10655.7	3328.8	2886.5	2994.1	2862.6	2850.7	2782.0	2704.3	2596.7	2560.9
60°	23119.3	10814.1	3173.4	2844.7	2940.3	2743.1	2683.3	2656.5	2578.8	2525.0	2540.0
62.5°	24888.2	10957.6	3015.0	2850.7	2877.6	2626.6	2537.0	2528.0	2480.2	2462.3	2462.3
65°	26095.5	10566.1	2817.8	2844.7	2779.0	2507.0	2393.5	2390.5	2351.7	2345.7	2342.7
67.5°	25674.1	9326.0	2551.8	2761.0	2677.4	2387.5	2262.1	2250.1	2199.2	2202.2	2202.2
70°	23564.5	7557.0	2184.4	2554.8	2551.8	2279.9	2124.6	2085.8	2017.0	2029.0	2040.9
72.5°	19608.1	5599.8	1691.2	2211.2	2351.7	2181.3	1966.2	1903.4	1816.8	1828.7	1825.7
75°	14160.8	3806.8	1231.1	1682.3	2046.9	2064.8	1810.8	1703.2	1598.7	1616.6	1622.6
77.5°	7246.2	2157.4	905.4	1159.4	1607.6	1876.6	1670.3	1526.9	1503.1	1670.3	1646.5
80°	2363.6	1081.7	627.5	812.8	1054.8	1535.9	1464.2	1299.8	1293.9	1332.7	1144.4
82.5°	705.2	457.2	403.4	534.8	582.7	1177.3	1264.0	983.1	845.6	890.4	920.3
85°	242.0	221.1	230.1	266.0	277.9	690.2	884.5	651.4	615.5	678.3	669.3
87.5°	56.8	77.7	65.7	59.8	59.8	167.4	343.7	271.9	376.5	251.0	242.0
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)