

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: P971420

Luminaire Tested: **NAV-SB6D-735-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971420
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-735-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 64424.3 lumens
Efficiency: N/A
Efficacy: 146.4 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

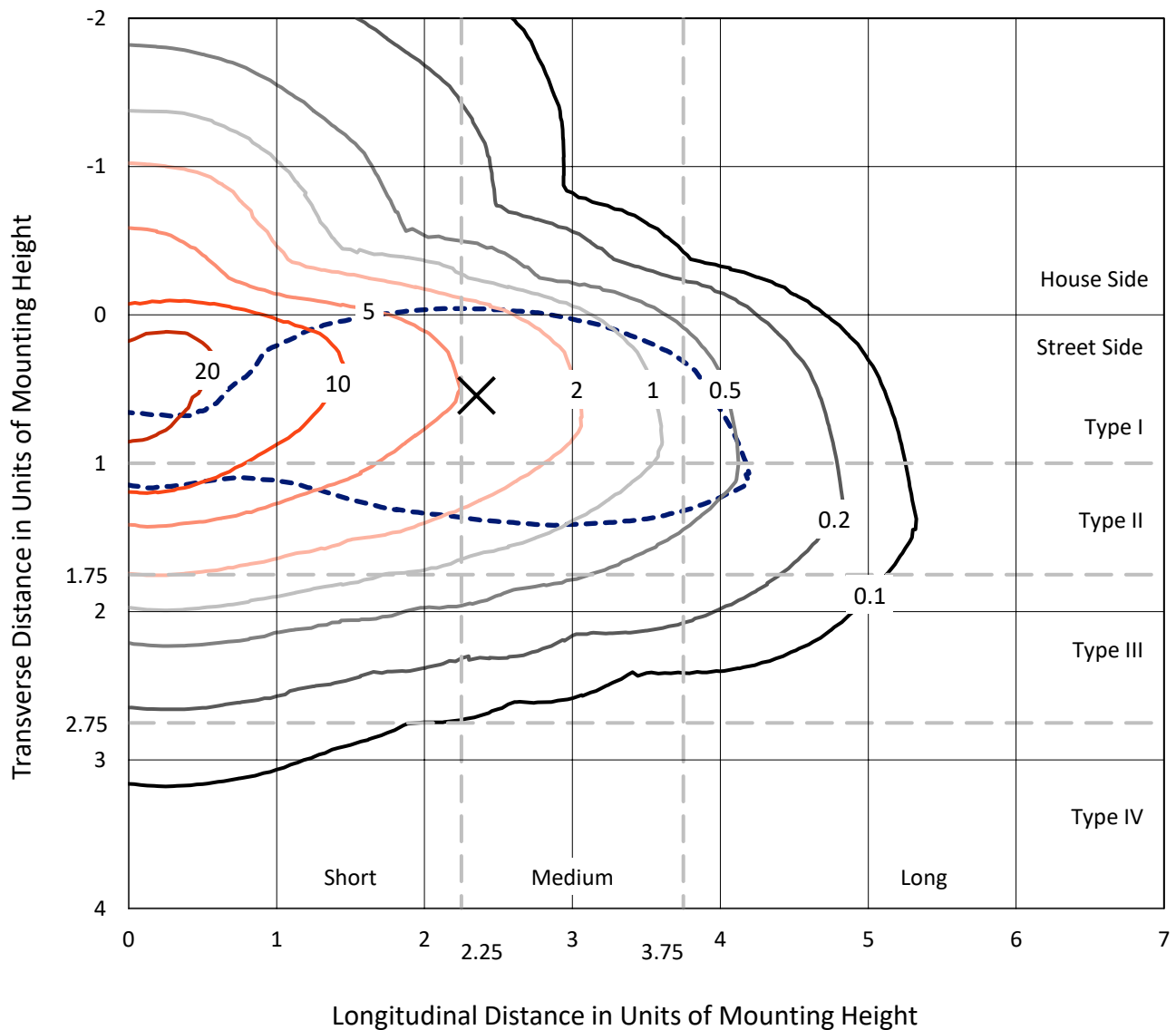


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Iso-Footcandle Lines of Horizontal Illumination

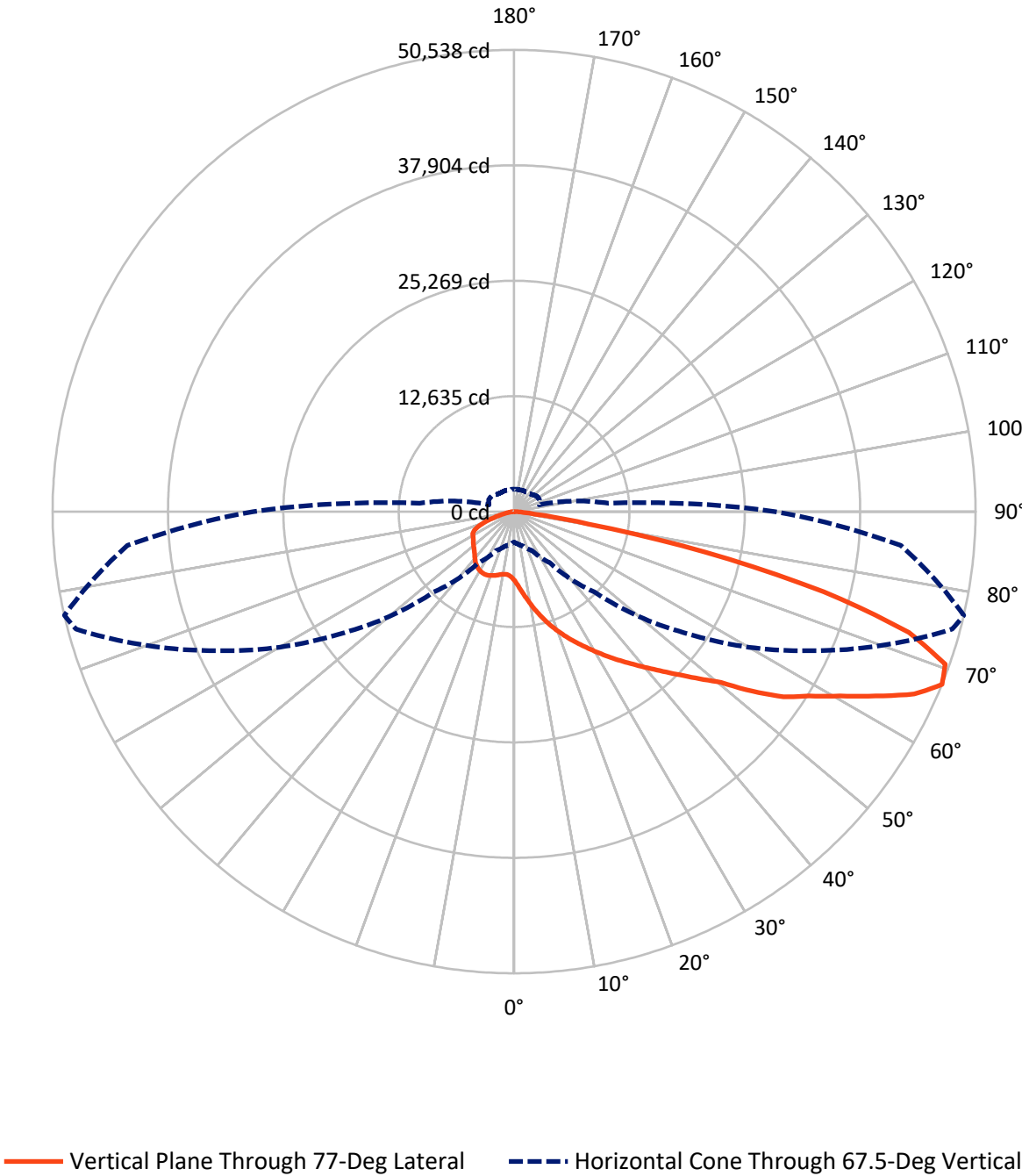
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.6 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	12186.5	0.0	12186.5
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	52237.8	0.0	52237.8
	% Fixture	81.1	0.0	81.1
Total	Lumens	64424.3	0.0	64424.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	810.2	1.3
10°-20°	2910.8	4.5
20°-30°	5495.9	8.5
30°-40°	8853.8	13.7
40°-50°	12110.3	18.8
50°-60°	13660.5	21.2
60°-70°	12750.4	19.8
70°-80°	6989.4	10.8
80°-90°	843.1	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°	64424.3	100.0
0°-180°	64424.3	100.0

Coefficient of Utilization



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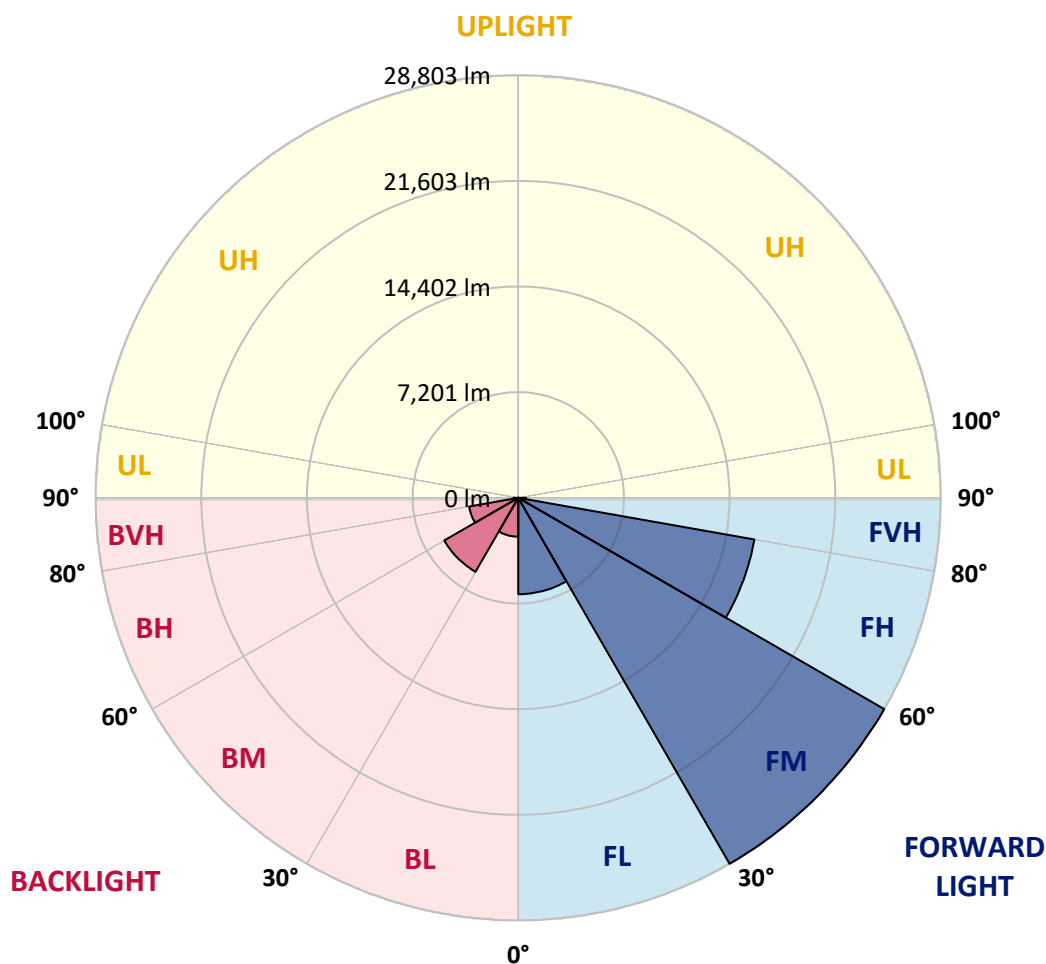
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6567.3	10.2			
FM	(30°-60°)	28803.4	44.7			
FH	(60°-80°)	16339.9	25.4			G5
FVH	(80°-90°)	527.2	0.8			G4/750
BL	(0°-30°)	2649.6	4.1	B4/5000		
BM	(30°-60°)	5821.2	9.0	B4/8500		
BH	(60°-80°)	3399.8	5.3	B4/5000		G4/5000
BVH	(80°-90°)	315.8	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°	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0
2.5°	9464.5	9531.1	9447.9	9447.9	9168.5	9022.3	8742.8	8530.0	8147.6	8081.1	7828.3
5°	11187.2	11270.3	11153.8	11104.0	10774.8	10472.1	10003.3	9541.0	8859.3	8789.5	8194.2
7.5°	12520.7	12627.1	12524.1	12470.8	12178.1	11839.0	11290.3	10645.0	9684.0	9547.7	8686.4
10°	13608.1	13624.8	13591.5	13611.5	13382.0	13102.7	12540.7	11789.0	10588.6	10402.3	9281.6
12.5°	14223.4	14299.9	14366.4	14486.1	14446.1	14273.2	13767.8	12869.9	11546.3	11306.9	9930.1
15°	14512.7	14645.7	14795.4	15071.4	15294.2	15337.5	14951.7	14030.5	12520.7	12231.3	10585.2
17.5°	14615.8	14742.2	14978.3	15377.4	15856.2	16178.8	16005.9	15157.9	13485.1	13152.6	11273.6
20°	15137.9	15174.5	15317.5	15696.6	16215.4	16750.8	16880.5	16241.9	14439.6	14063.7	11985.3
22.5°	16255.3	16182.1	16222.1	16395.0	16767.5	17286.2	17582.1	17199.7	15420.6	14988.3	12703.6
25°	18101.0	17888.1	17675.3	17475.7	17665.4	17958.0	18293.9	18157.5	16448.2	15899.5	13428.5
27.5°	20432.1	20172.8	19703.9	19048.7	18819.3	18922.4	19072.1	19045.4	17399.3	16843.9	14176.8
30°	22726.8	22424.2	21865.5	20917.7	20312.4	20039.8	19926.7	19850.3	18433.5	17841.6	14931.7
32.5°	24559.2	24319.8	23771.0	22710.2	21832.2	21366.6	20990.9	20718.2	19514.4	18922.4	15729.9
35°	26162.1	25939.3	25310.7	24153.5	23199.0	22703.5	22211.3	21629.3	20638.4	20039.8	16587.9
37.5°	27625.4	27402.6	26541.2	25337.4	24376.2	24033.8	23594.8	22607.1	21765.8	21200.4	17495.7
40°	28549.8	28499.9	27695.2	26331.7	25334.0	25164.5	25018.1	23741.0	23016.2	22490.7	18493.4
42.5°	28786.0	28895.7	28257.2	27136.5	26185.4	26049.0	26391.6	25024.8	24419.5	23917.4	19624.0
45°	28217.3	28533.2	28114.2	27352.6	26790.6	26717.4	27608.7	26428.2	25972.6	25513.6	20987.6
47.5°	26777.3	27312.8	27139.8	27033.4	26953.6	27269.5	28679.5	27918.0	27731.8	27332.6	22544.0
50°	23870.8	24885.1	25187.7	25859.5	26631.0	27698.5	29654.0	29544.2	29786.9	29384.6	24439.5
52.5°	18845.9	20242.6	21998.6	23681.2	25640.0	27555.5	30724.8	31878.7	32903.0	32683.5	27452.4
55°	15556.9	16185.5	17535.6	20621.8	23717.8	26953.6	31206.9	33764.3	35995.7	35799.6	29737.1
57.5°	13029.5	13591.5	14422.9	17000.2	20811.3	25586.8	31506.2	34915.0	38114.1	38094.1	31991.8
60°	10319.2	10914.4	11765.8	13591.5	17415.9	23225.7	31439.7	36225.2	40817.8	40984.1	34742.1
62.5°	7259.7	7914.8	8859.3	10561.9	13947.4	20166.2	30082.9	37173.0	44000.4	44452.6	38051.0
65°	4772.2	5204.4	5916.2	7386.0	10392.4	16232.0	27492.3	37296.1	47405.7	48170.6	41157.0
67.5°	3345.5	3511.8	3930.8	4728.9	6850.6	12447.5	23365.3	36022.4	49677.0	50538.3	42503.9
70°	2610.6	2693.7	2906.5	3225.8	4303.3	8370.5	17904.8	32710.1	49191.5	50089.4	41097.2
72.5°	2254.7	2334.5	2414.4	2454.3	2886.6	5167.9	12128.3	27349.4	44618.9	45227.5	35733.0
75°	2045.2	2065.2	2131.7	2118.4	2201.5	3352.2	7000.2	19926.7	35204.2	34994.7	26378.3
77.5°	1719.3	1745.9	1855.7	1839.1	1955.4	2291.3	3634.9	12859.9	22823.3	21399.9	14682.3
80°	1456.6	1469.8	1589.6	1569.7	1699.3	1659.5	1855.7	6554.7	9680.7	8200.8	4233.5
82.5°	505.5	625.2	1213.8	1250.4	1296.9	1004.3	1070.8	2673.7	2956.4	2264.7	888.0
85°	246.1	262.7	618.6	877.9	874.6	505.5	522.1	954.5	931.1	731.6	296.0
87.5°	39.9	49.9	73.2	342.6	272.6	133.0	179.6	186.2	192.9	166.3	66.5
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°	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0	7559.0
2.5°	7642.1	7475.8	7126.6	6804.1	6551.3	6308.6	6172.2	6055.8	5989.3	5976.1	5976.1
5°	7848.3	7505.8	6870.6	6335.2	5986.0	5726.6	5590.2	5503.7	5460.6	5433.9	5430.7
7.5°	8144.2	7642.1	6737.5	6129.0	5763.2	5576.9	5507.1	5493.8	5490.5	5493.8	5503.7
10°	8553.3	7864.9	6724.3	6079.1	5773.1	5670.1	5666.7	5670.1	5683.3	5686.7	5690.0
12.5°	8995.6	8094.4	6777.5	6122.3	5899.5	5843.0	5833.0	5829.7	5839.6	5846.3	5849.7
15°	9477.9	8397.0	6867.3	6215.5	6039.2	5979.3	5969.4	5949.4	5946.1	5942.7	5939.5
17.5°	9973.4	8696.3	6967.0	6315.2	6129.0	6045.9	6009.3	5962.7	5926.1	5916.2	5926.1
20°	10475.5	8992.3	7036.8	6365.1	6135.6	6019.2	5946.1	5866.3	5803.0	5766.5	5779.8
22.5°	11010.9	9301.6	7080.1	6351.8	6075.8	5916.2	5783.2	5690.0	5593.5	5530.4	5533.7
25°	11533.0	9570.9	7076.8	6281.9	5959.3	5756.5	5587.0	5467.2	5334.2	5267.7	5267.7
27.5°	12035.1	9813.7	6993.7	6158.9	5793.1	5567.0	5364.1	5221.1	5091.4	5028.2	5024.9
30°	12554.0	10016.5	6863.9	5979.3	5596.9	5347.5	5124.7	5001.6	4885.3	4825.4	4822.0
32.5°	13069.4	10202.7	6681.1	5756.5	5370.8	5131.4	4911.8	4798.7	4728.9	4728.9	4732.2
35°	13614.8	10332.5	6438.2	5497.2	5131.4	4901.9	4728.9	4662.4	4655.8	4615.9	4605.8
37.5°	14190.1	10415.6	6142.3	5231.1	4895.2	4679.0	4625.8	4546.0	4479.6	4393.0	4379.7
40°	14795.4	10498.8	5786.4	4955.1	4645.8	4526.1	4502.8	4396.3	4206.8	3994.0	3964.1
42.5°	15530.3	10555.2	5417.3	4679.0	4383.1	4343.1	4376.4	4193.5	3890.9	3731.3	3734.6
45°	16381.7	10648.4	5078.2	4406.4	4113.7	4113.7	4253.3	4013.9	3764.5	3664.8	3681.4
47.5°	17485.8	10864.6	4762.2	4107.1	3864.2	3930.8	3980.7	3797.7	3658.1	3535.0	3531.7
50°	19082.0	11383.3	4436.3	3804.4	3674.7	3807.8	3737.9	3631.5	3468.5	3368.8	3358.8
52.5°	21064.1	11689.3	4146.9	3531.7	3511.8	3644.8	3545.1	3445.2	3322.2	3189.2	3162.6
55°	22414.2	11745.9	3904.2	3332.2	3402.1	3388.8	3352.2	3262.4	3195.8	3019.6	3022.9
57.5°	23924.0	11858.9	3704.7	3212.5	3332.2	3185.9	3172.6	3096.1	3009.6	2889.9	2850.0
60°	25729.8	12035.1	3531.7	3165.9	3272.3	3052.9	2986.3	2956.4	2870.0	2810.1	2826.7
62.5°	27698.5	12194.8	3355.4	3172.6	3202.5	2923.2	2823.4	2813.4	2760.2	2740.2	2740.2
65°	29042.0	11759.1	3136.0	3165.9	3092.7	2790.2	2663.8	2660.5	2617.2	2610.6	2607.2
67.5°	28573.1	10379.0	2840.1	3072.8	2979.7	2657.1	2517.4	2504.2	2447.6	2451.0	2451.0
70°	26225.2	8410.3	2431.0	2843.4	2840.1	2537.4	2364.5	2321.2	2244.8	2258.1	2271.4
72.5°	21822.2	6232.1	1882.3	2460.9	2617.2	2427.6	2188.2	2118.4	2021.9	2035.2	2032.0
75°	15759.8	4236.7	1370.1	1872.3	2278.0	2297.9	2015.3	1895.5	1779.2	1799.1	1805.7
77.5°	8064.5	2401.1	1007.7	1290.3	1789.1	2088.4	1858.9	1699.3	1672.8	1858.9	1832.4
80°	2630.6	1203.9	698.3	904.6	1173.9	1709.3	1629.5	1446.6	1439.9	1483.2	1273.7
82.5°	784.8	508.8	449.0	595.3	648.5	1310.3	1406.7	1094.1	941.2	991.0	1024.3
85°	269.4	246.1	256.0	296.0	309.2	768.2	984.4	725.0	685.1	754.9	745.0
87.5°	63.1	86.5	73.2	66.5	66.5	186.2	382.4	302.6	419.0	279.3	269.4
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)