

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: P965033

Luminaire Tested: **NAV-SB3D-727-U-T2R-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965033  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-727-U-T2R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

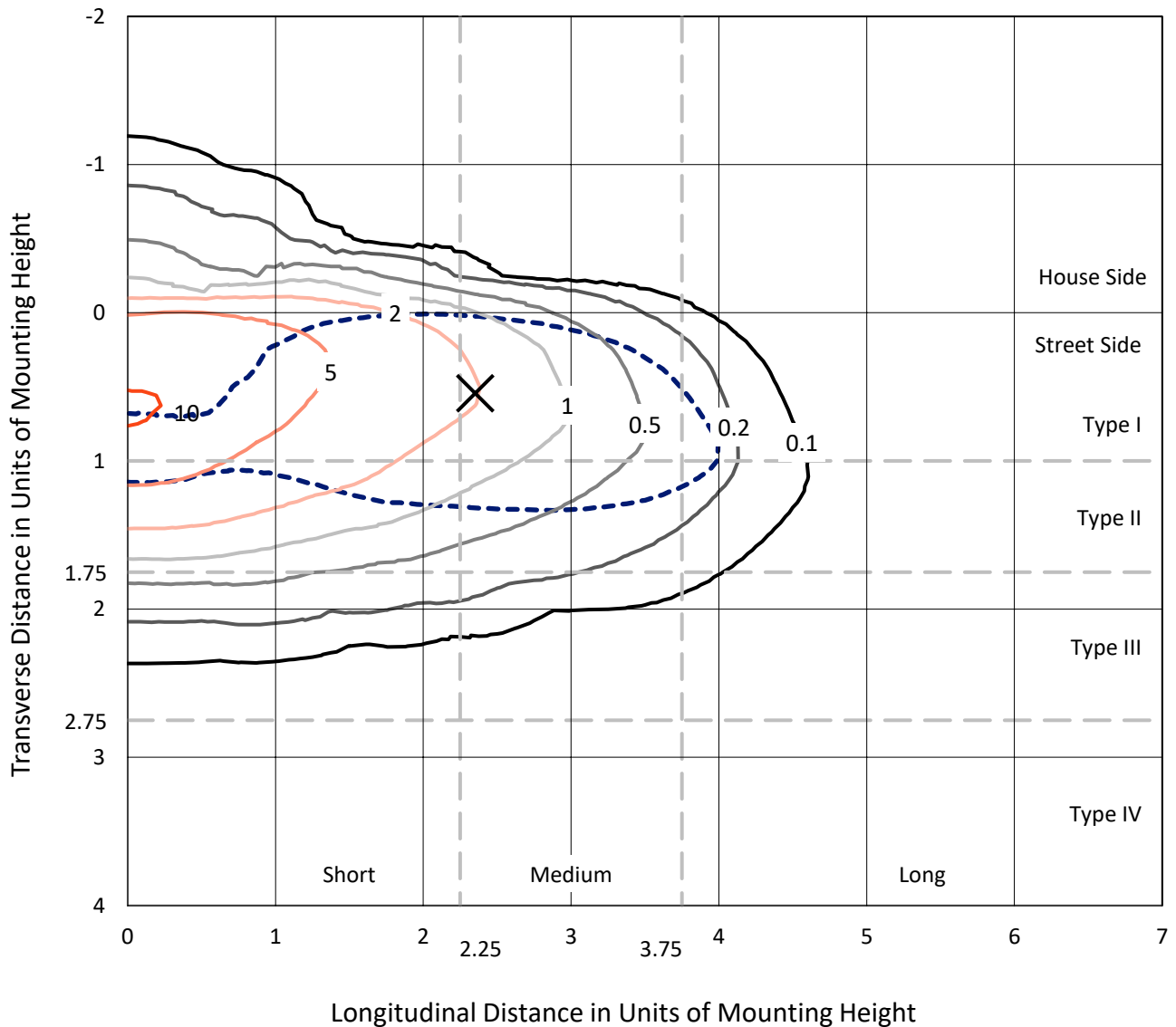
Lumens per Lamp: N/A  
Luminaire Lumens: 24576.4 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 218.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

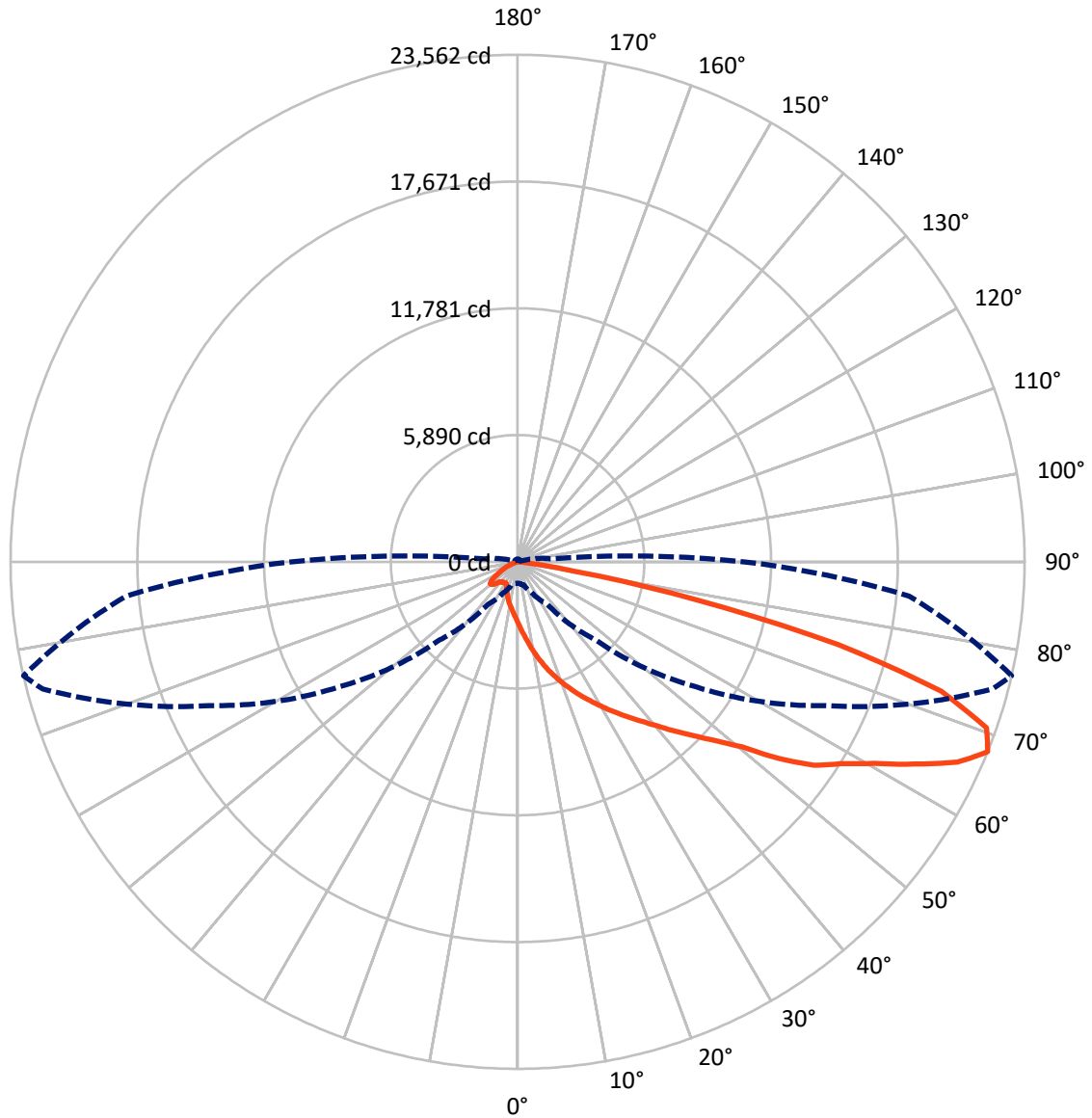
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1808.1	0.0	1808.1
	% Fixture	7.4	0.0	7.4
<b>Street Side</b>	Lumens	22768.3	0.0	22768.3
	% Fixture	92.6	0.0	92.6
<b>Total</b>	Lumens	24576.4	0.0	24576.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	289.3	1.2
10°-20°	1012.9	4.1
20°-30°	1954.7	8.0
30°-40°	3393.5	13.8
40°-50°	4927.2	20.0
50°-60°	5658.2	23.0
60°-70°	4912.4	20.0
70°-80°	2313.8	9.4
80°-90°	114.4	0.5
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°	24576.4	100.0
0°-180°	24576.4	100.0

**Coefficient of Utilization**



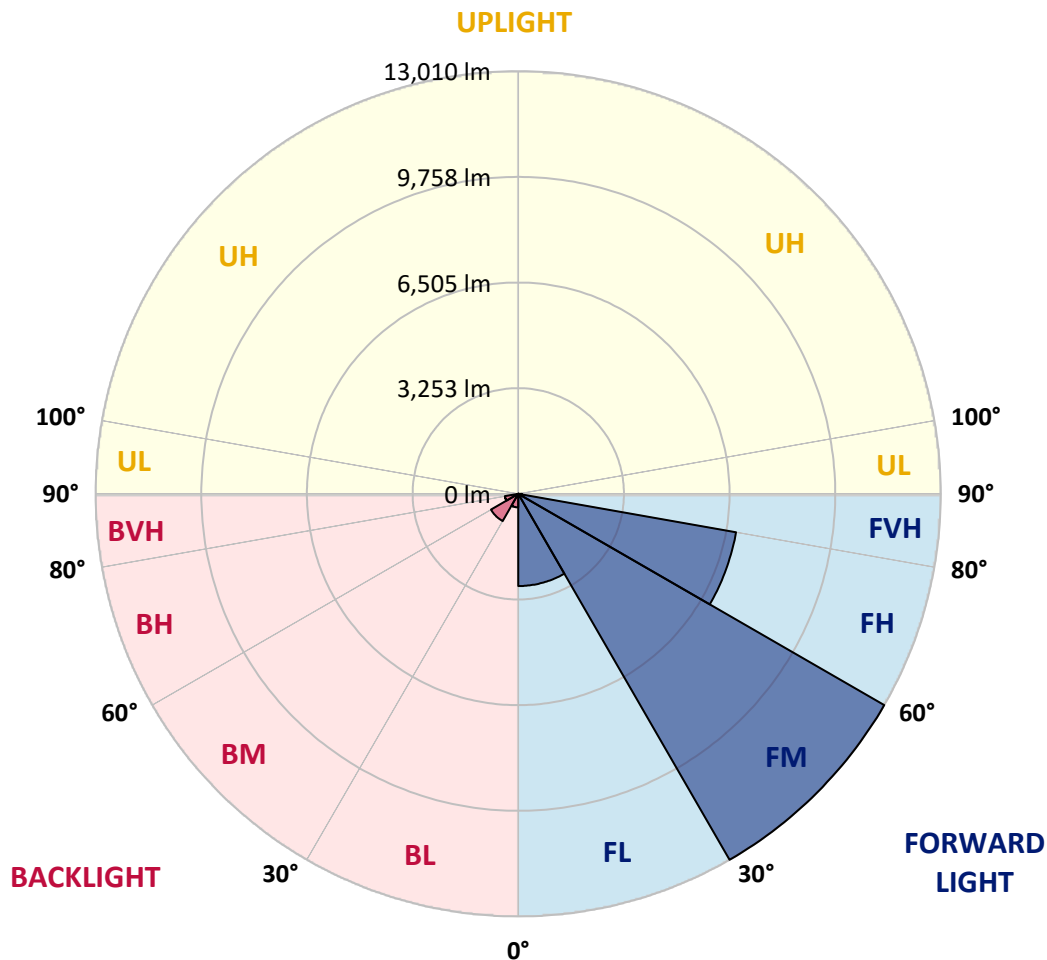
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 CATALOG NUMBER: NAV-SB3D-727-U-T2R-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2838.3	11.5			
FM (30°-60°)	13010.1	52.9			
FH (60°-80°)	6807.6	27.7			G3/7500
FVH (80°-90°)	112.3	0.5			G2/225
BL (0°-30°)	418.6	1.7	B1/500		
BM (30°-60°)	968.8	3.9	B1/1000		
BH (60°-80°)	418.6	1.7	B1/500		G1/500
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0
2.5°	3923.7	3948.1	3913.0	3845.8	3745.1	3679.5	3519.2	3368.2	3200.3	3146.9	2979.0
5°	4782.9	4804.3	4764.6	4691.3	4557.0	4428.8	4218.2	3902.3	3574.2	3468.9	3171.2
7.5°	5419.3	5431.5	5416.2	5349.1	5220.9	5075.9	4840.9	4467.0	3980.2	3864.1	3407.8
10°	5877.1	5916.8	5912.2	5886.3	5800.8	5683.3	5433.0	5007.2	4435.0	4285.4	3674.9
12.5°	6180.9	6225.1	6251.1	6309.0	6304.5	6229.6	6009.9	5559.7	4888.2	4712.6	3975.6
15°	6269.3	6316.7	6415.9	6550.2	6669.2	6707.3	6553.2	6101.5	5387.2	5162.9	4283.9
17.5°	6219.0	6292.3	6411.3	6623.4	6884.4	7056.8	7040.0	6624.9	5840.4	5584.1	4586.1
20°	6330.4	6400.6	6493.7	6672.2	6975.9	7288.8	7413.9	7125.5	6290.7	6022.1	4903.5
22.5°	6946.9	6934.7	6943.9	6972.9	7154.5	7464.3	7722.2	7580.3	6736.3	6461.6	5239.2
25°	7923.7	7868.7	7775.6	7618.4	7572.7	7722.2	7990.8	7983.2	7206.4	6911.9	5582.6
27.5°	9043.9	9034.7	8816.4	8438.0	8224.3	8166.3	8294.5	8375.4	7671.8	7357.4	5927.5
30°	10116.8	10141.1	9846.6	9425.4	9033.1	8805.8	8689.7	8747.8	8145.0	7838.2	6283.0
32.5°	11050.7	11076.7	10756.1	10263.2	9777.9	9503.2	9259.0	9115.5	8660.7	8326.6	6673.8
35°	11839.7	11865.7	11497.8	10953.0	10435.6	10187.0	9910.7	9518.5	9179.7	8868.3	7108.7
37.5°	12544.8	12537.2	12044.3	11494.8	10986.6	10789.8	10644.7	10014.5	9713.8	9413.2	7590.9
40°	12961.4	12993.5	12572.2	11966.4	11473.4	11329.9	11320.8	10629.5	10330.4	10038.8	8119.0
42.5°	13083.5	13140.0	12834.7	12337.2	11890.1	11734.4	11974.0	11294.9	11047.7	10763.8	8715.7
45°	12863.7	12918.7	12779.8	12434.9	12173.9	12073.2	12535.6	11984.7	11813.7	11533.0	9388.8
47.5°	12222.8	12291.5	12325.0	12251.7	12248.7	12350.9	13039.2	12711.1	12723.3	12436.4	10168.6
50°	10982.1	11098.0	11406.3	11665.7	12067.1	12570.7	13529.2	13498.6	13748.9	13501.7	11185.0
52.5°	8726.4	8891.3	9953.5	10663.1	11565.0	12529.5	14067.8	14762.3	15548.2	15186.5	12618.1
55°	7012.5	7012.5	7876.3	9204.1	10585.3	12257.9	14302.8	15583.3	16773.7	16688.2	13626.9
57.5°	5716.8	5785.5	6336.4	7510.1	9167.5	11610.8	14447.9	16099.2	17761.1	17698.6	14612.7
60°	3528.5	3676.5	4717.3	5875.6	7554.4	10458.6	14356.3	16621.1	18959.1	19009.4	15800.1
62.5°	1987.1	2042.0	2505.9	4227.4	5874.1	8909.5	13655.8	16912.6	20491.4	20705.0	17024.0
65°	1372.0	1399.4	1578.0	2631.1	4071.7	7093.4	12286.9	16731.0	22026.6	22458.6	18061.7
67.5°	996.6	1010.3	1121.7	1607.0	2415.8	5143.0	10141.1	15815.2	22840.1	23561.9	18260.2
70°	766.1	775.3	856.2	1056.1	1426.9	3174.3	7365.1	13994.6	22251.0	23113.2	17243.8
72.5°	622.7	631.8	694.4	781.4	946.2	1877.2	4464.0	11365.1	19650.5	20581.4	14679.8
75°	525.0	537.2	593.7	650.2	741.7	1205.6	2093.9	7914.5	14777.5	15388.0	10208.3
77.5°	291.5	268.5	482.3	538.7	625.8	763.1	979.8	4657.7	8276.2	8445.6	4529.6
80°	181.6	187.7	383.0	433.4	480.7	384.6	448.6	1793.2	2869.1	2725.7	877.5
82.5°	10.7	24.4	294.6	312.8	329.6	164.8	169.4	609.0	691.4	634.9	155.7
85°	0.0	0.0	134.3	108.3	114.5	47.4	48.8	142.0	93.1	100.8	30.5
87.5°	0.0	0.0	0.0	3.1	0.0	4.6	9.1	12.2	4.6	6.1	10.7
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°	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0	2834.0
2.5°	2872.2	2765.3	2548.7	2336.5	2164.1	2003.8	1889.4	1781.0	1726.1	1723.0	1720.0
5°	2959.2	2734.8	2301.4	1918.4	1610.1	1362.8	1202.6	1088.1	1030.1	1010.3	1007.3
7.5°	3081.3	2744.0	2084.6	1552.1	1188.9	976.7	885.2	848.5	836.3	822.6	819.5
10°	3235.4	2765.3	1890.9	1249.9	937.1	830.2	793.6	778.3	769.2	760.0	757.0
12.5°	3407.8	2785.2	1698.6	1037.8	824.1	769.2	743.2	724.9	712.7	702.0	698.9
15°	3575.7	2797.4	1498.7	889.7	766.1	721.9	694.4	674.6	657.7	645.5	644.0
17.5°	3742.1	2814.1	1311.0	801.2	718.8	674.6	647.1	622.7	609.0	595.2	593.7
20°	3926.8	2811.2	1134.0	738.6	671.5	627.2	598.3	575.3	561.6	546.3	544.8
22.5°	4097.6	2795.9	978.3	685.2	622.7	579.9	547.9	525.0	511.3	499.1	497.5
25°	4294.5	2783.7	848.5	636.4	576.9	534.1	499.1	477.6	462.4	451.7	450.2
27.5°	4483.8	2765.3	753.9	592.1	532.6	491.4	457.9	433.4	419.6	412.0	412.0
30°	4670.0	2760.7	718.8	549.4	492.9	451.7	418.2	395.2	384.6	381.5	380.0
32.5°	4894.3	2772.9	734.1	534.1	456.3	415.1	383.0	366.2	355.6	355.6	355.6
35°	5133.9	2770.0	757.0	547.9	431.9	378.4	354.0	343.4	332.7	332.7	332.7
37.5°	5434.5	2774.5	775.3	570.8	422.7	348.0	334.3	320.5	314.4	314.4	314.4
40°	5883.2	2925.6	766.1	590.6	419.6	326.6	299.1	294.6	290.0	290.0	290.0
42.5°	6432.6	3253.8	778.3	592.1	418.2	311.3	274.7	283.8	273.2	271.6	270.1
45°	7034.0	3612.3	856.2	560.1	416.7	303.7	262.5	273.2	256.4	256.4	256.4
47.5°	7630.6	3968.0	935.5	514.3	412.0	302.2	251.8	245.7	241.1	242.6	242.6
50°	8453.3	4258.0	966.1	451.7	401.4	299.1	232.0	233.5	230.4	233.5	233.5
52.5°	9349.0	4318.9	929.4	381.5	370.8	290.0	218.2	224.4	222.8	225.9	225.9
55°	9907.6	4253.3	767.6	317.4	323.5	253.4	204.5	216.7	216.7	216.7	216.7
57.5°	10484.5	3974.0	544.8	257.9	268.5	207.6	192.3	209.1	207.6	206.0	206.0
60°	10899.6	3522.3	358.6	212.2	213.6	171.0	178.6	196.9	195.4	187.7	187.7
62.5°	11209.4	3023.2	230.4	180.1	163.3	154.2	163.3	178.6	172.4	155.7	152.6
65°	11174.3	2332.0	177.0	154.2	134.3	134.3	142.0	155.7	137.4	109.9	106.8
67.5°	10522.6	1578.0	146.5	129.8	113.0	111.4	117.5	129.8	117.5	93.1	90.0
70°	9358.2	1031.7	117.5	100.8	90.0	82.4	94.6	111.4	99.2	74.8	71.8
72.5°	7595.6	628.7	88.6	73.3	65.6	53.4	74.8	91.5	79.3	54.9	51.9
75°	4914.2	320.5	61.1	47.4	35.1	32.1	54.9	68.7	54.9	33.6	29.0
77.5°	1880.2	134.3	33.6	21.3	18.3	15.3	30.5	41.2	22.9	7.6	6.1
80°	361.7	56.5	16.8	10.7	9.1	6.1	4.6	3.1	0.0	0.0	0.0
82.5°	62.5	18.3	6.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)