

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: P967147

Luminaire Tested: **NAV-SB4D-727-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-727-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32280.3 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

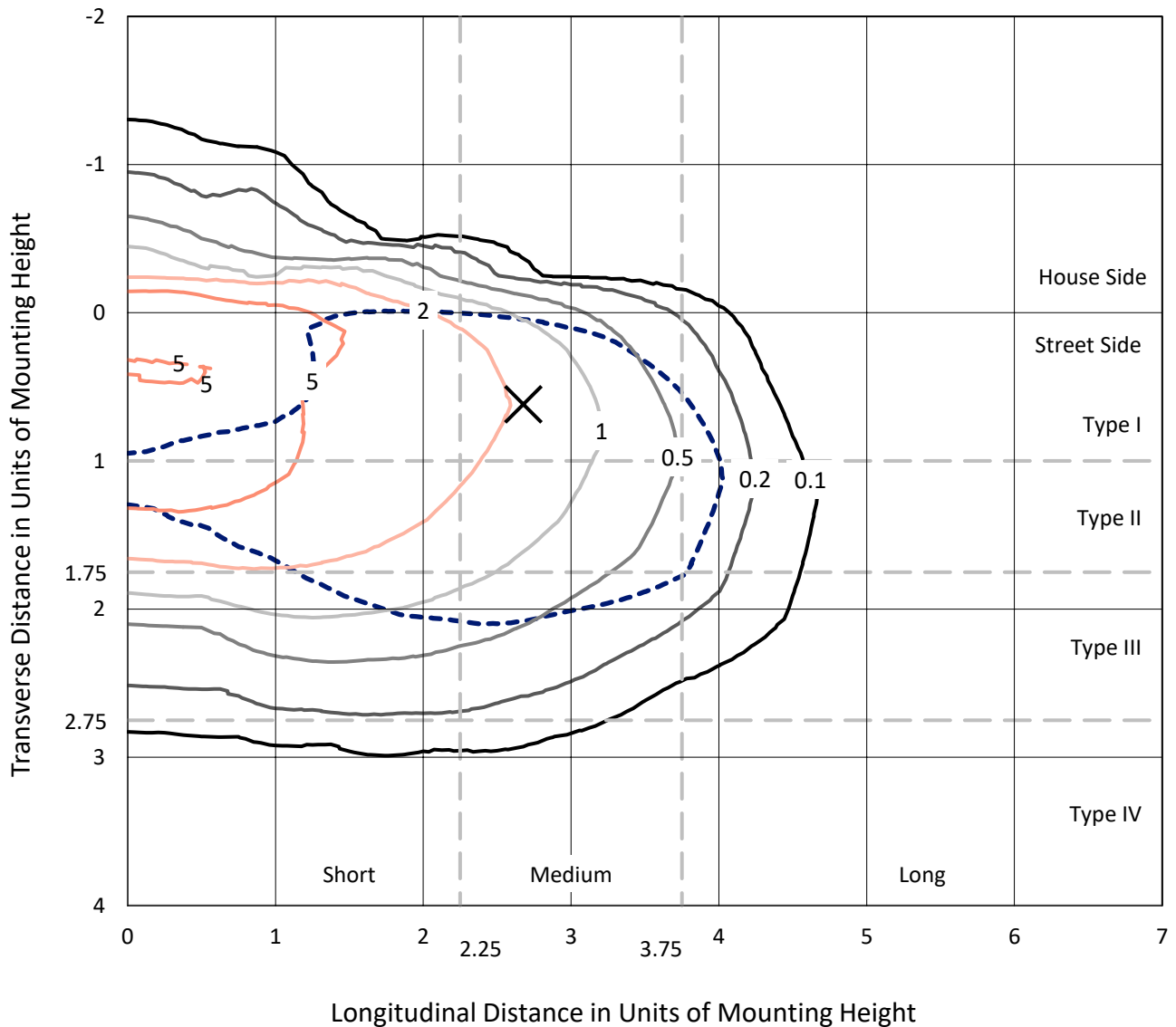
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967147
 CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

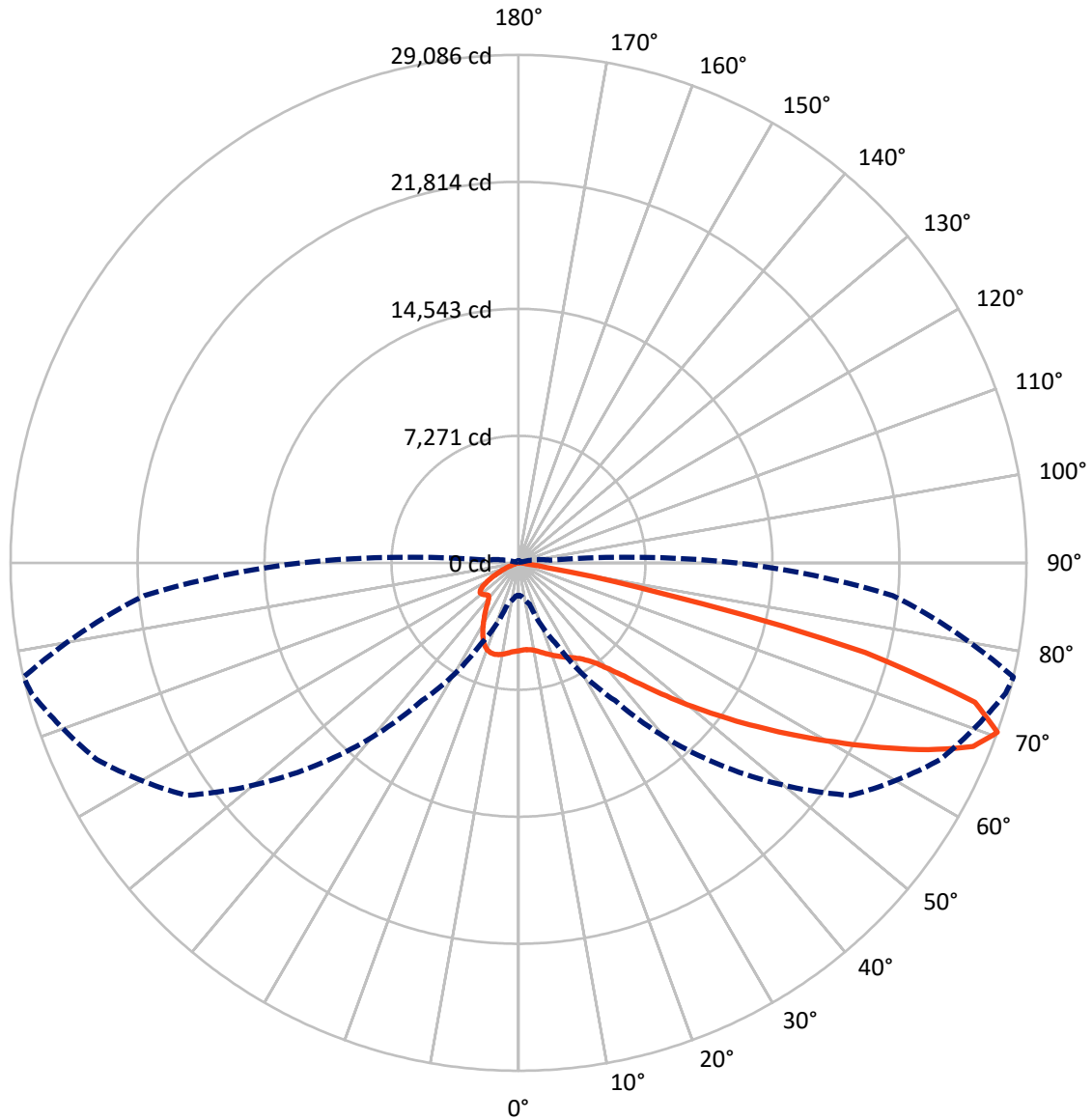
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P967147
CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P967147
 CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3402.8	0.0	3402.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	28877.5	0.0	28877.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	32280.3	0.0	32280.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.9	1.3
10°-20°	1030.1	3.2
20°-30°	1593.3	4.9
30°-40°	2891.2	9.0
40°-50°	5457.5	16.9
50°-60°	7885.7	24.4
60°-70°	8394.1	26.0
70°-80°	4448.3	13.8
80°-90°	146.1	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°	32280.3	100.0
0°-180°	32280.3	100.0

Coefficient of Utilization

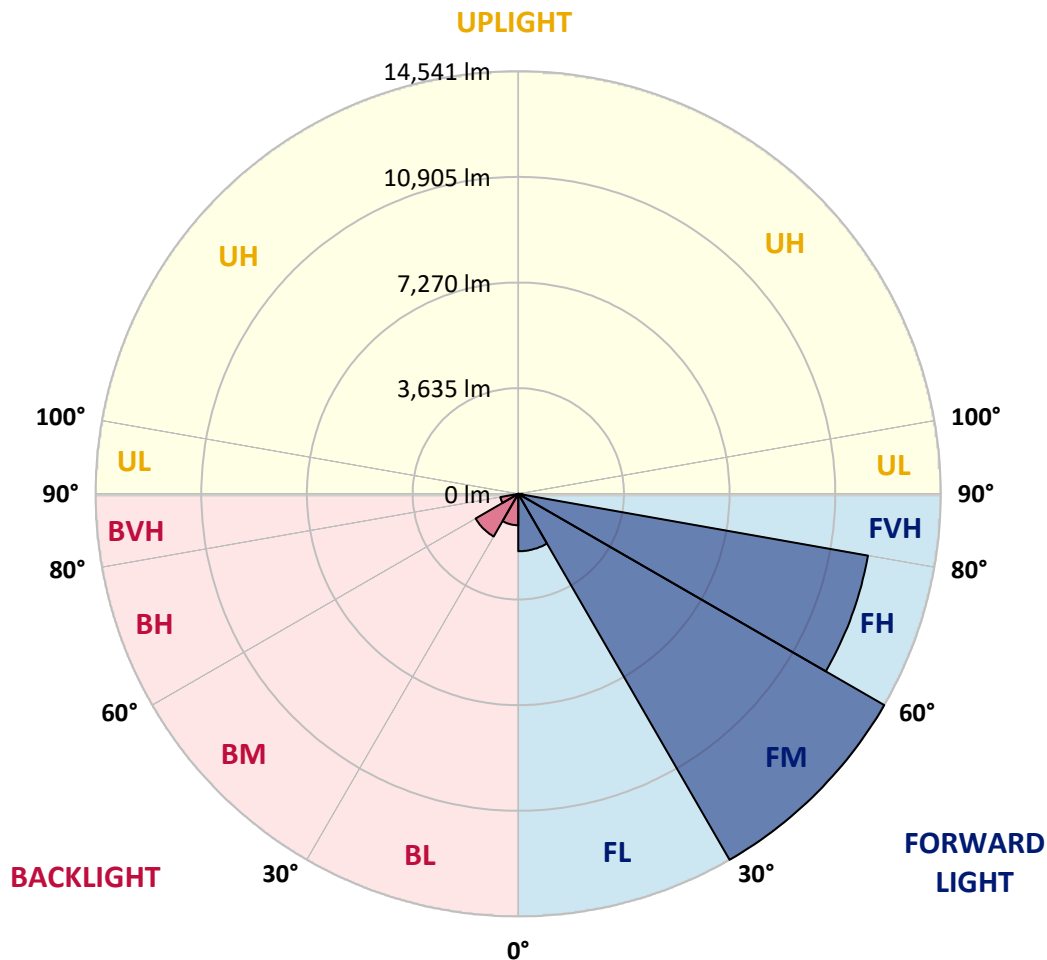


REPORT NUMBER: P967147
 CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1976.3	6.1			
FM (30°-60°)	14540.5	45.0			
FH (60°-80°)	12218.6	37.9			G5
FVH (80°-90°)	142.1	0.4			G2/225
BL (0°-30°)	1081.1	3.3	B3/2500		
BM (30°-60°)	1693.9	5.2	B2/2500		
BH (60°-80°)	623.8	1.9	B2/1000		G2/1000
BVH (80°-90°)	3.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type III Medium



REPORT NUMBER: P967147
 CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1
2.5°	4727.3	4770.1	4764.0	4792.6	4802.7	4843.5	4884.3	4939.4	5000.5	4998.4	5039.2
5°	4460.3	4503.1	4513.3	4552.0	4600.9	4664.2	4747.7	4857.8	4972.0	4990.3	5071.8
7.5°	4144.3	4189.2	4215.6	4293.1	4382.8	4513.3	4649.9	4810.9	5000.5	5027.0	5183.9
10°	3828.4	3869.1	3903.8	4013.8	4156.6	4350.2	4572.4	4804.8	5059.6	5098.3	5320.6
12.5°	3632.6	3671.3	3710.1	3805.9	3983.3	4219.7	4521.5	4833.3	5157.5	5212.5	5506.1
15°	3563.3	3598.0	3628.6	3714.2	3879.3	4148.4	4511.2	4892.4	5281.8	5355.2	5730.3
17.5°	3573.6	3591.9	3612.3	3677.5	3838.5	4115.8	4529.6	4994.4	5428.6	5493.8	5954.5
20°	3632.6	3642.8	3644.9	3689.7	3832.4	4111.7	4566.3	5092.2	5567.2	5654.8	6176.8
22.5°	3708.0	3712.1	3708.0	3738.7	3871.1	4142.2	4615.2	5210.5	5722.2	5803.7	6400.9
25°	4060.7	3983.3	3885.5	3826.3	3936.4	4201.4	4688.6	5369.5	5891.3	5970.8	6619.0
27.5°	5155.4	4933.2	4582.6	4189.2	4070.9	4287.0	4790.5	5530.5	6062.6	6133.9	6853.5
30°	6933.0	6641.5	6046.3	5159.5	4503.1	4466.4	4923.1	5691.5	6244.0	6321.5	7104.3
32.5°	8714.7	8643.3	7956.4	6729.1	5475.4	4866.0	5143.1	5909.6	6484.6	6545.6	7442.6
35°	10516.7	10372.0	9809.4	8596.5	6973.8	5679.3	5510.1	6195.1	6800.5	6869.9	7936.0
37.5°	11896.8	11809.1	11460.5	10461.7	8751.3	6935.0	6138.0	6637.4	7259.2	7336.6	8567.9
40°	13115.8	13075.1	12956.8	12298.4	10738.9	8578.1	7114.4	7322.4	7895.2	7986.9	9342.6
42.5°	14074.0	14169.8	14237.0	14053.6	12787.7	10453.6	8427.2	8284.6	8782.0	8875.7	10329.2
45°	15054.5	15087.1	15358.2	15623.3	14822.1	12414.6	9907.2	9411.9	9884.8	10001.0	11511.6
47.5°	15684.3	15814.8	16291.9	16758.6	16532.4	14359.3	11497.2	10743.0	11163.0	11381.1	12836.6
50°	15731.3	15977.9	16634.3	17447.8	17777.9	16210.3	13225.9	12259.7	12706.1	12946.7	14251.3
52.5°	14950.5	15333.8	16351.0	17541.4	18450.6	17777.9	15013.7	13776.3	14349.2	14663.0	15719.0
55°	11462.6	11964.1	15284.8	17031.8	18477.2	18966.4	16754.6	15356.1	16179.7	16534.5	17305.0
57.5°	9986.7	10239.4	12017.1	16147.1	17985.9	19445.5	18328.3	16860.6	18171.4	18611.7	18803.3
60°	8309.1	8641.3	10078.4	14699.7	17319.3	19492.3	19718.6	18801.3	20330.2	20825.5	20177.3
62.5°	5646.7	6007.5	7436.5	12212.8	16408.1	19469.9	20858.1	20799.0	22729.5	23261.6	21341.3
65°	3498.1	3724.3	4666.2	9972.4	15134.0	19494.4	22050.7	23224.9	25261.3	25801.6	22242.3
67.5°	2764.2	2868.2	3359.4	7656.6	12938.5	18943.9	23241.2	25506.0	27644.4	28072.5	22517.5
70°	1857.1	1920.3	2444.2	5133.0	9625.9	16404.0	23218.7	26651.6	28871.6	29085.6	21514.5
72.5°	978.5	1027.5	1429.0	2376.9	5813.9	11660.3	19571.9	25281.7	27650.5	27328.4	18389.5
75°	489.2	570.8	962.2	1206.8	2483.0	6502.9	12153.6	19932.7	21763.2	20515.7	11799.0
77.5°	371.0	448.4	795.0	795.0	864.4	2189.4	5147.2	10871.5	10027.5	8349.8	3463.5
80°	236.5	305.8	695.2	601.4	360.8	556.5	1341.3	3045.6	2130.3	1620.6	629.9
82.5°	138.6	199.8	578.9	397.5	201.8	205.9	379.1	648.2	552.5	430.1	193.6
85°	55.0	130.5	397.5	156.9	79.5	50.9	114.2	138.6	114.2	85.6	48.9
87.5°	0.0	30.5	69.3	0.0	6.1	4.1	8.2	10.1	10.1	8.2	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P967147
 CATALOG NUMBER: NAV-SB4D-727-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1	5035.1
2.5°	5057.6	5061.7	5073.9	5075.9	5047.4	5010.7	4996.5	4990.3	4965.8	4963.8	4967.9
5°	5118.7	5137.1	5118.7	5065.8	4939.4	4761.9	4627.5	4517.4	4417.4	4386.9	4368.5
7.5°	5241.0	5259.4	5204.3	4996.5	4678.4	4325.7	4007.7	3783.5	3581.7	3506.2	3475.7
10°	5416.3	5440.8	5267.6	4847.6	4285.0	3718.3	3180.1	2800.9	2505.3	2385.1	2334.1
12.5°	5636.5	5646.7	5302.2	4621.3	3773.3	2964.0	2201.6	1795.9	1533.0	1435.1	1404.6
15°	5879.1	5864.8	5306.2	4313.5	3076.1	2095.6	1437.2	1180.3	1074.3	1041.7	1041.7
17.5°	6133.9	6074.8	5224.7	3869.1	2311.7	1433.1	1066.1	1005.0	986.7	978.5	976.4
20°	6384.6	6252.2	5075.9	3288.1	1659.4	1070.2	968.3	950.0	939.7	935.7	931.6
22.5°	6613.0	6386.7	4821.1	2613.3	1204.8	945.9	915.3	899.0	880.7	872.5	870.4
25°	6835.2	6464.2	4462.3	1983.5	964.2	884.7	860.3	829.6	805.2	795.0	791.0
27.5°	7051.3	6513.1	4013.8	1467.7	860.3	827.7	782.8	739.9	721.6	717.6	713.5
30°	7281.6	6529.4	3504.2	1094.7	797.0	756.2	691.1	642.2	631.9	634.0	634.0
32.5°	7563.0	6553.8	2990.5	897.0	744.0	670.7	593.2	542.2	534.1	542.2	540.2
35°	7899.3	6602.7	2495.2	825.6	697.2	583.0	499.5	456.6	448.4	454.6	452.5
37.5°	8355.9	6682.3	2032.4	811.3	658.5	509.6	419.9	385.3	385.3	387.3	385.3
40°	8963.4	6894.3	1618.6	801.1	638.1	454.6	354.8	340.4	346.6	350.7	350.7
42.5°	9703.4	7344.8	1339.3	788.9	615.6	430.1	322.1	316.0	326.2	330.3	330.3
45°	10533.0	7915.6	1241.5	768.5	595.2	446.4	307.8	299.7	311.9	314.0	316.0
47.5°	11391.2	8474.1	1229.2	746.1	574.8	470.9	303.7	285.4	299.7	301.7	303.7
50°	12259.7	8839.0	1241.5	711.5	542.2	470.9	305.8	271.1	283.3	289.5	291.5
52.5°	13134.1	9006.2	1233.3	636.0	485.1	442.4	305.8	258.9	271.1	275.2	275.2
55°	13982.2	8973.6	1108.9	523.9	411.7	391.3	297.7	248.7	256.9	258.9	258.9
57.5°	14652.9	8519.0	878.6	407.7	334.4	326.2	271.1	236.5	242.6	240.6	240.6
60°	15003.5	7520.1	627.9	314.0	263.0	256.9	238.5	220.2	224.3	214.0	212.0
62.5°	15007.6	6199.1	419.9	248.7	209.9	203.9	203.9	197.7	193.6	173.2	167.2
65°	14687.5	4733.4	279.3	197.7	169.2	159.0	171.3	169.2	154.9	126.4	122.3
67.5°	13961.8	3102.7	212.0	154.9	130.5	124.3	136.5	142.7	132.5	106.0	103.9
70°	12469.6	1806.2	175.3	120.2	97.9	91.7	110.1	122.3	110.1	85.6	81.6
72.5°	10357.7	974.4	142.7	89.7	67.2	61.2	87.6	99.9	87.6	63.2	61.2
75°	6721.0	521.8	110.1	59.1	34.6	38.7	65.2	73.4	61.2	40.8	36.7
77.5°	2256.6	230.3	69.3	28.5	16.3	16.3	38.7	44.9	28.5	14.2	12.2
80°	503.5	95.8	28.5	12.2	6.1	6.1	8.2	8.2	4.1	0.0	0.0
82.5°	165.1	38.7	12.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	63.2	14.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	24.5	2.0	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)