

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: P967761

Luminaire Tested: **NAV-SB5A-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967761
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-SB5A-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA 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: 20805.4 lumens
Efficiency: N/A
Efficacy: 146.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

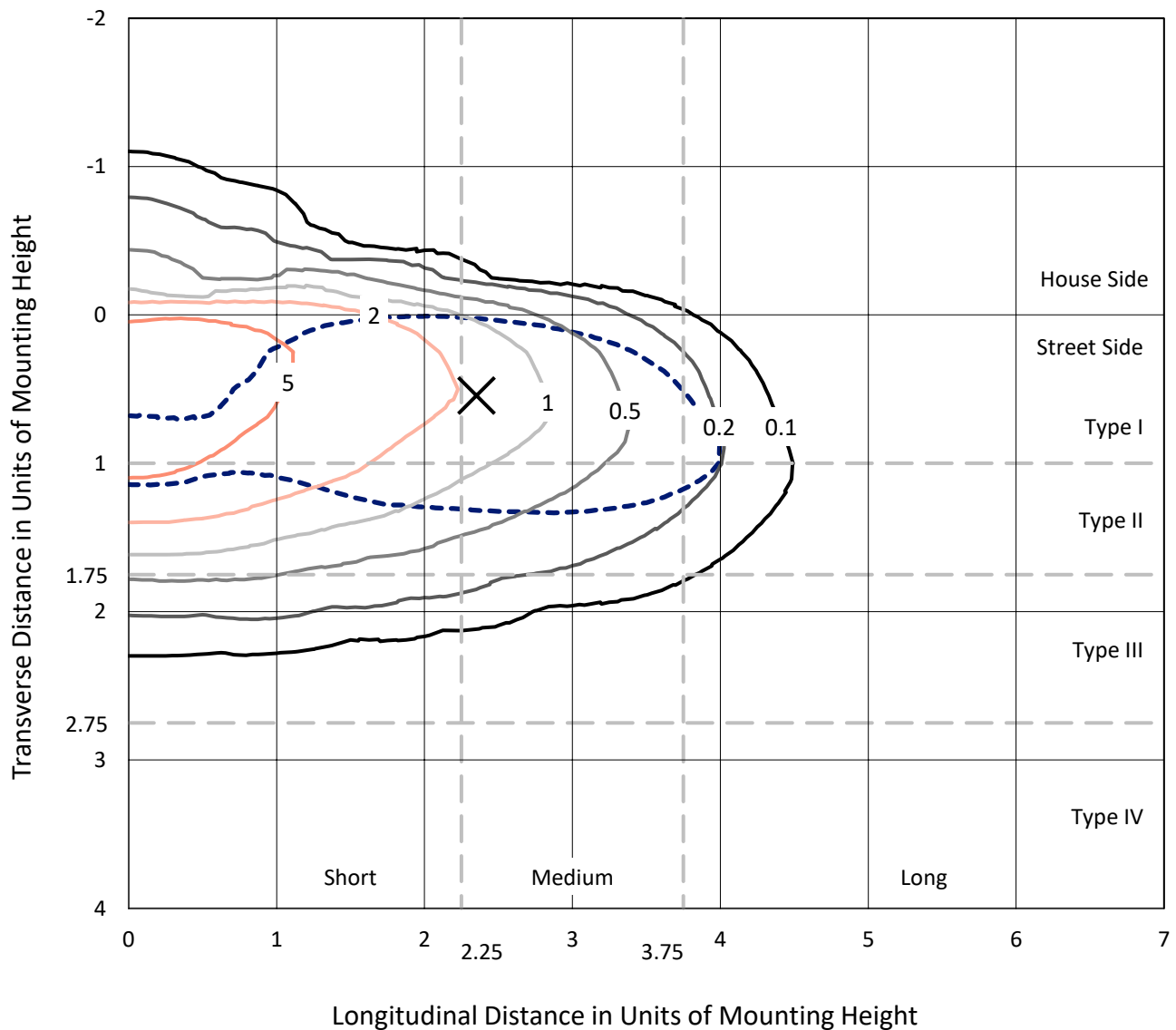
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967761
CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

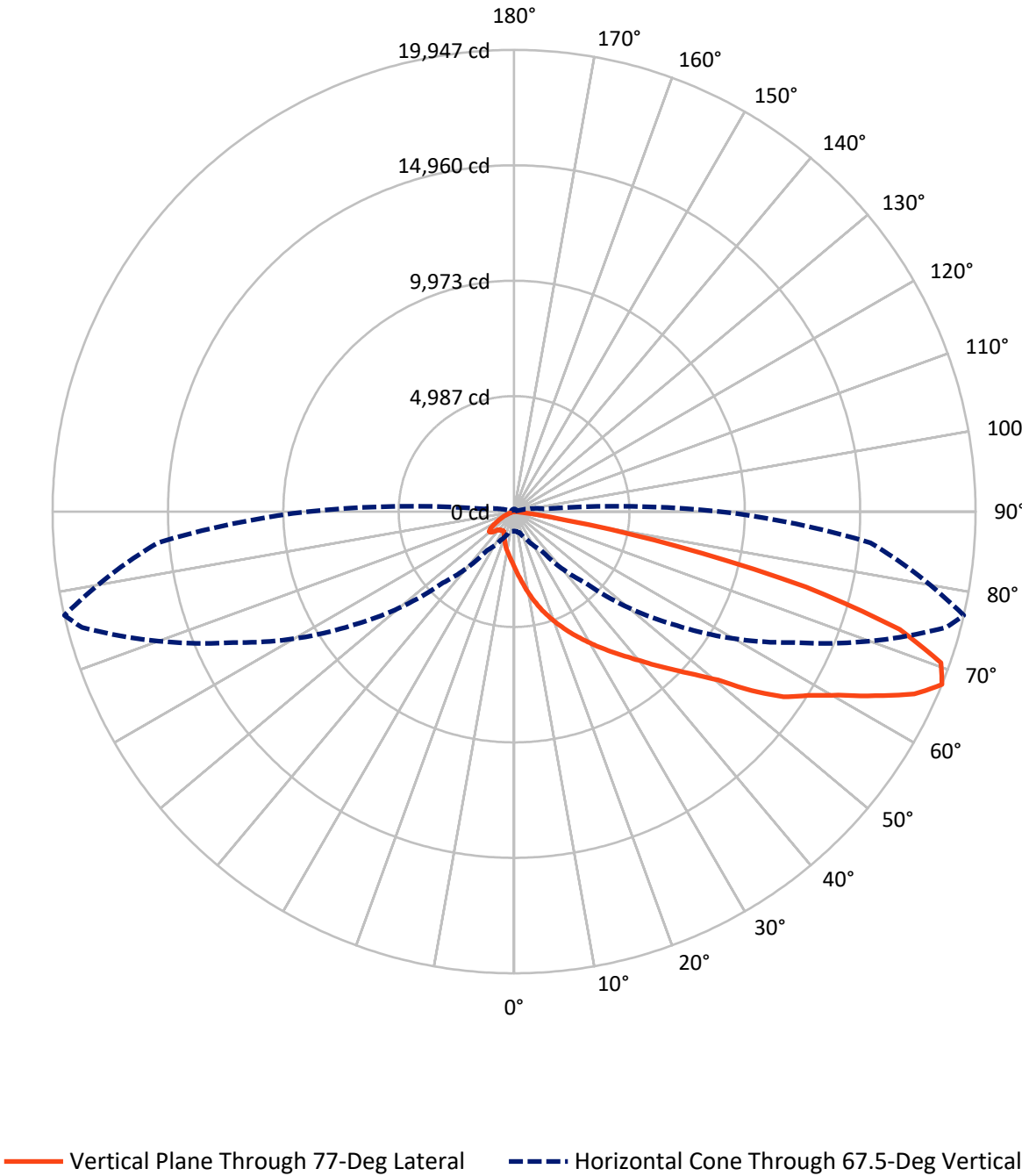
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
Type II - Medium - N/A

REPORT NUMBER: P967761
CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967761

CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1530.7	0.0	1530.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	19274.8	0.0	19274.8
	% Fixture	92.6	0.0	92.6
Total	Lumens	20805.4	0.0	20805.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.9	1.2
10°-20°	857.5	4.1
20°-30°	1654.8	8.0
30°-40°	2872.8	13.8
40°-50°	4171.2	20.0
50°-60°	4790.0	23.0
60°-70°	4158.6	20.0
70°-80°	1958.8	9.4
80°-90°	96.9	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°	20805.4	100.0
0°-180°	20805.4	100.0

Coefficient of Utilization



REPORT NUMBER: P967761

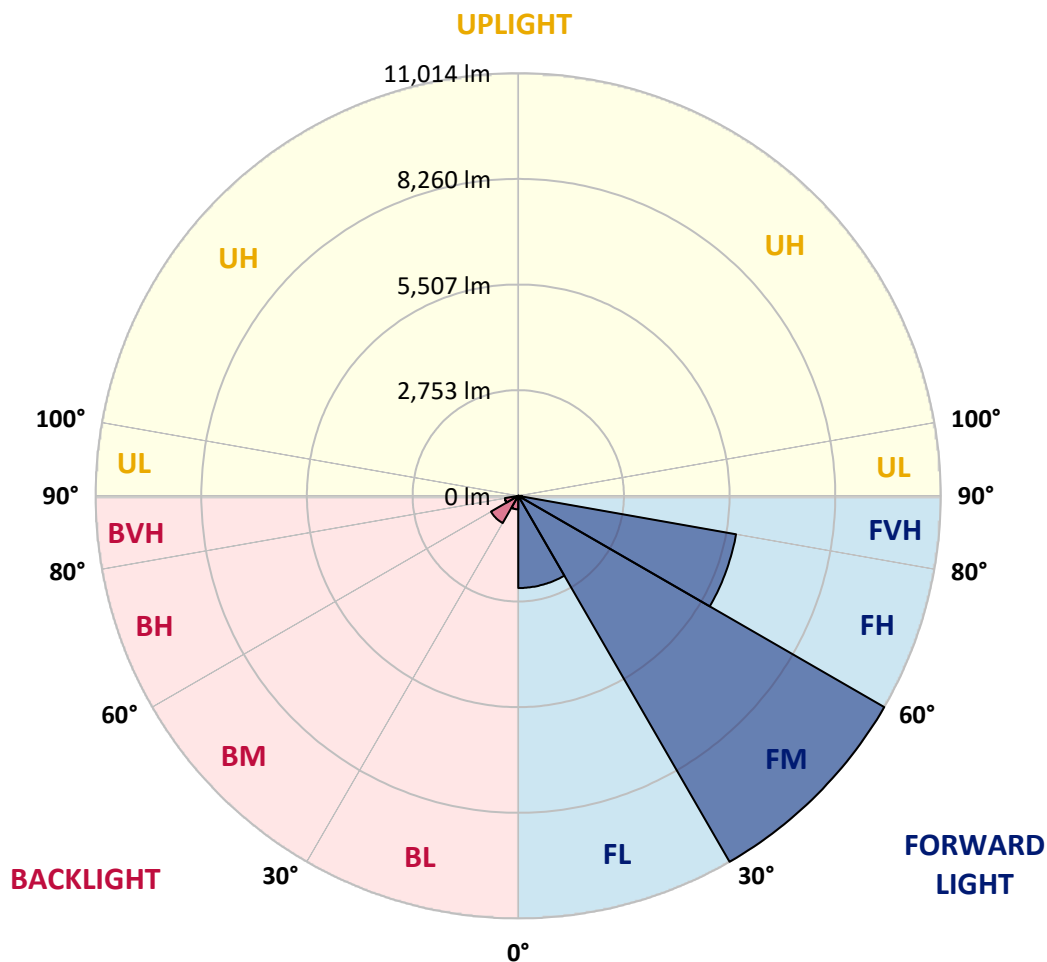
CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2402.8	11.5			
FM	(30°-60°)	11013.8	52.9			
FH	(60°-80°)	5763.0	27.7			G3/7500
FVH	(80°-90°)	95.1	0.5			G1/100
BL	(0°-30°)	354.4	1.7	B1/500		
BM	(30°-60°)	820.2	3.9	B1/1000		
BH	(60°-80°)	354.4	1.7	B1/500		G1/500
BVH	(80°-90°)	1.8	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



REPORT NUMBER: P967761

CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2
2.5°	3321.6	3342.3	3312.6	3255.7	3170.4	3114.9	2979.3	2851.3	2709.3	2664.1	2521.9
5°	4049.1	4067.1	4033.5	3971.5	3857.8	3749.2	3571.0	3303.6	3025.8	2936.6	2684.7
7.5°	4587.8	4598.0	4585.1	4528.3	4419.8	4297.1	4098.2	3781.5	3369.5	3271.3	2885.0
10°	4975.3	5009.0	5005.1	4983.1	4910.8	4811.2	4599.4	4238.9	3754.5	3627.8	3111.1
12.5°	5232.4	5269.9	5291.9	5341.0	5337.1	5273.8	5087.8	4706.6	4138.1	3989.6	3365.6
15°	5307.3	5347.4	5431.4	5545.1	5645.9	5678.2	5547.7	5165.3	4560.6	4370.7	3626.6
17.5°	5264.7	5326.7	5427.6	5607.2	5828.0	5974.0	5959.9	5608.4	4944.3	4727.3	3882.4
20°	5359.1	5418.5	5497.3	5648.5	5905.5	6170.4	6276.4	6032.1	5325.5	5098.0	4151.0
22.5°	5881.0	5870.7	5878.5	5903.0	6056.7	6319.0	6537.3	6417.2	5702.7	5470.2	4435.3
25°	6707.9	6661.4	6582.6	6449.5	6410.8	6537.3	6764.7	6758.2	6100.7	5851.3	4726.0
27.5°	7656.1	7648.4	7463.6	7143.2	6962.4	6913.3	7021.9	7090.3	6494.7	6228.5	5018.0
30°	8564.4	8585.1	8335.7	7979.1	7647.1	7454.6	7356.4	7405.5	6895.2	6635.5	5319.0
32.5°	9355.1	9377.1	9105.8	8688.4	8277.6	8045.0	7838.4	7716.9	7331.9	7048.9	5649.8
35°	10023.1	10045.0	9733.6	9272.5	8834.5	8623.8	8390.0	8057.9	7771.1	7507.6	6018.0
37.5°	10619.9	10613.5	10196.2	9731.0	9300.8	9134.2	9011.4	8477.9	8223.4	7968.9	6426.2
40°	10972.6	10999.8	10643.2	10130.3	9713.0	9591.5	9583.8	8998.5	8745.3	8498.5	6873.2
42.5°	11075.9	11123.8	10865.4	10444.2	10065.7	9933.9	10136.7	9561.8	9352.5	9112.2	7378.4
45°	10889.9	10936.4	10818.9	10527.0	10306.0	10220.7	10612.1	10145.8	10001.1	9763.3	7948.2
47.5°	10347.4	10405.5	10433.9	10371.9	10369.3	10455.8	11038.5	10760.8	10771.1	10528.2	8608.4
50°	9297.0	9395.2	9656.1	9875.8	10215.6	10641.9	11453.2	11427.4	11639.3	11430.0	9468.7
52.5°	7387.5	7527.0	8426.2	9027.0	9790.5	10607.0	11909.3	12497.1	13162.5	12856.3	10681.9
55°	5936.6	5936.6	6667.8	7791.8	8961.1	10377.0	12108.2	13192.3	14199.9	14127.6	11536.0
57.5°	4839.6	4897.9	5364.2	6357.8	7760.8	9829.2	12231.0	13628.9	15035.8	14982.9	12370.5
60°	2987.1	3112.3	3993.5	4974.0	6395.2	8853.8	12153.5	14070.8	16050.1	16092.7	13375.7
62.5°	1682.1	1728.7	2121.4	3578.7	4972.8	7542.5	11560.5	14317.5	17347.2	17528.0	14411.8
65°	1161.4	1184.7	1335.9	2227.3	3447.0	6005.1	10401.6	14163.8	18646.9	19012.5	15290.3
67.5°	843.7	855.3	949.6	1360.5	2045.2	4353.9	8585.1	13388.7	19335.5	19946.6	15458.3
70°	648.5	656.3	724.8	894.0	1208.0	2687.2	6235.0	11847.3	18836.8	19566.7	14597.8
72.5°	527.2	534.8	587.8	661.5	801.0	1589.2	3779.0	9621.3	16635.3	17423.4	12427.4
75°	444.4	454.8	502.6	550.4	627.9	1020.7	1772.5	6700.1	12510.0	13026.8	8642.0
77.5°	246.7	227.3	408.3	456.0	529.7	646.0	829.4	3943.1	7006.3	7149.7	3834.5
80°	153.8	158.9	324.3	367.0	406.9	325.5	379.9	1518.0	2428.8	2307.5	742.9
82.5°	9.0	20.7	249.4	264.9	279.1	139.5	143.4	515.5	585.3	537.4	131.8
85°	0.0	0.0	113.7	91.7	96.9	40.1	41.3	120.1	78.8	85.3	25.8
87.5°	0.0	0.0	0.0	2.6	0.0	3.9	7.8	10.4	3.9	5.1	9.0
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: P967761

CATALOG NUMBER: NAV-SB5A-740-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2	2399.2
2.5°	2431.5	2341.0	2157.6	1978.0	1832.0	1696.4	1599.4	1507.7	1461.2	1458.6	1456.0
5°	2505.1	2315.2	1948.3	1624.0	1363.0	1153.7	1018.0	921.2	872.1	855.3	852.7
7.5°	2608.5	2323.0	1764.8	1313.9	1006.4	826.9	749.4	718.3	708.0	696.4	693.8
10°	2739.0	2341.0	1600.7	1058.1	793.2	702.8	671.8	658.9	651.2	643.4	640.8
12.5°	2885.0	2357.8	1438.0	878.5	697.6	651.2	629.1	613.7	603.3	594.3	591.7
15°	3027.0	2368.2	1268.7	753.2	648.5	611.1	587.8	571.0	556.9	546.5	545.2
17.5°	3167.9	2382.4	1109.8	678.2	608.5	571.0	547.8	527.2	515.5	503.9	502.6
20°	3324.2	2379.8	959.9	625.4	568.5	530.9	506.5	487.1	475.4	462.5	461.2
22.5°	3468.9	2366.8	828.1	580.0	527.2	491.0	463.8	444.4	432.9	422.5	421.2
25°	3635.6	2356.6	718.3	538.7	488.4	452.2	422.5	404.4	391.4	382.4	381.1
27.5°	3795.8	2341.0	638.3	501.3	450.9	416.0	387.6	367.0	355.3	348.8	348.8
30°	3953.4	2337.2	608.5	465.1	417.3	382.4	354.0	334.7	325.5	323.0	321.7
32.5°	4143.4	2347.5	621.5	452.2	386.3	351.4	324.3	310.1	301.0	301.0	301.0
35°	4346.2	2344.9	640.8	463.8	365.6	320.4	299.7	290.7	281.7	281.7	281.7
37.5°	4600.7	2348.8	656.3	483.2	357.8	294.6	282.9	271.3	266.2	266.2	266.2
40°	4980.5	2476.7	648.5	500.0	355.3	276.4	253.2	249.4	245.5	245.5	245.5
42.5°	5445.6	2754.5	658.9	501.3	354.0	263.5	232.6	240.3	231.2	230.0	228.7
45°	5954.6	3058.1	724.8	474.2	352.7	257.1	222.2	231.2	217.1	217.1	217.1
47.5°	6459.9	3359.1	792.0	435.4	348.8	255.8	213.2	208.0	204.2	205.4	205.4
50°	7156.1	3604.6	817.8	382.4	339.8	253.2	196.4	197.6	195.1	197.6	197.6
52.5°	7914.5	3656.3	786.8	323.0	314.0	245.5	184.7	189.9	188.6	191.2	191.2
55°	8387.4	3600.7	649.8	268.8	273.9	214.4	173.1	183.5	183.5	183.5	183.5
57.5°	8875.8	3364.3	461.2	218.3	227.3	175.7	162.8	177.0	175.7	174.5	174.5
60°	9227.2	2981.8	303.6	179.6	180.9	144.7	151.2	166.7	165.3	158.9	158.9
62.5°	9489.4	2559.4	195.1	152.4	138.3	130.5	138.3	151.2	146.0	131.8	129.1
65°	9459.7	1974.2	149.9	130.5	113.7	113.7	120.1	131.8	116.2	93.1	90.4
67.5°	8908.1	1335.9	124.0	109.8	95.6	94.3	99.5	109.8	99.5	78.8	76.3
70°	7922.3	873.4	99.5	85.3	76.3	69.8	80.1	94.3	83.9	63.3	60.7
72.5°	6430.1	532.3	74.9	62.0	55.6	45.2	63.3	77.5	67.1	46.5	44.0
75°	4160.2	271.3	51.7	40.1	29.7	27.2	46.5	58.1	46.5	28.4	24.5
77.5°	1591.7	113.7	28.4	18.0	15.5	12.9	25.8	34.8	19.4	6.5	5.1
80°	306.2	47.8	14.2	9.0	7.8	5.1	3.9	2.6	0.0	0.0	0.0
82.5°	53.0	15.5	5.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	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)