

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: P882238

Luminaire Tested: **NAV-SB2A-735-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7170 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

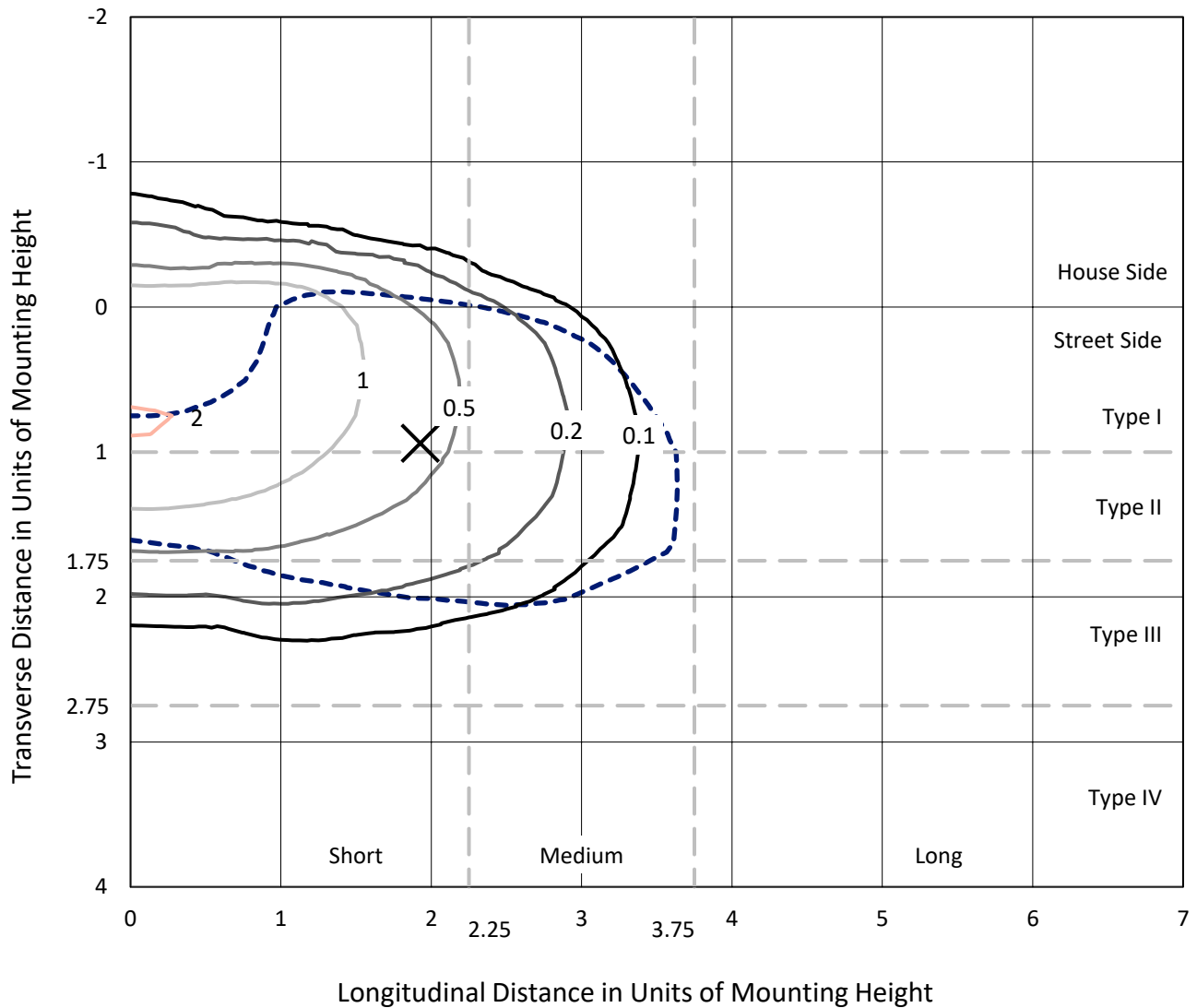
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882238
 CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

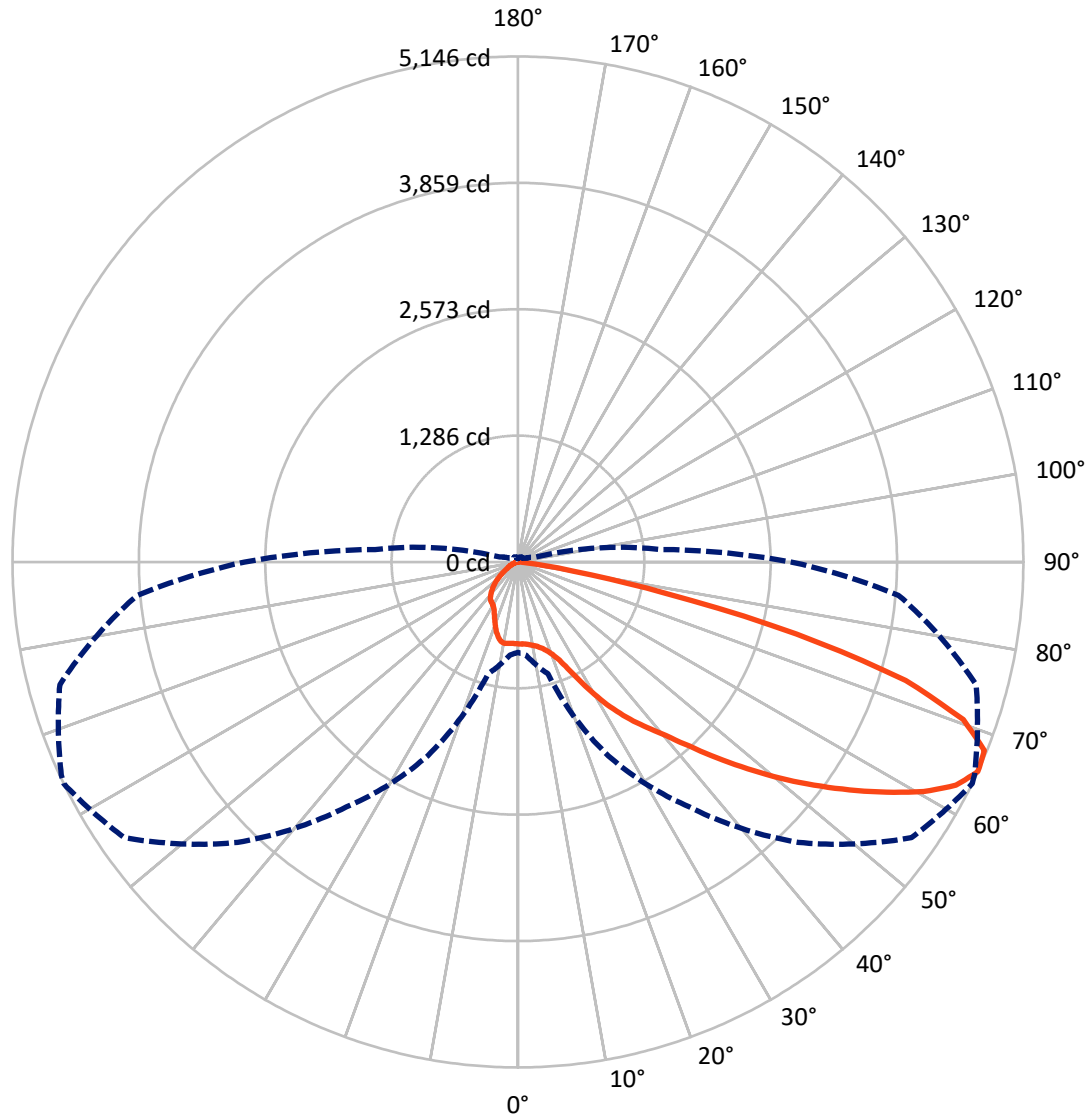
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Short - N/A

REPORT NUMBER: P882238
CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P882238

CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

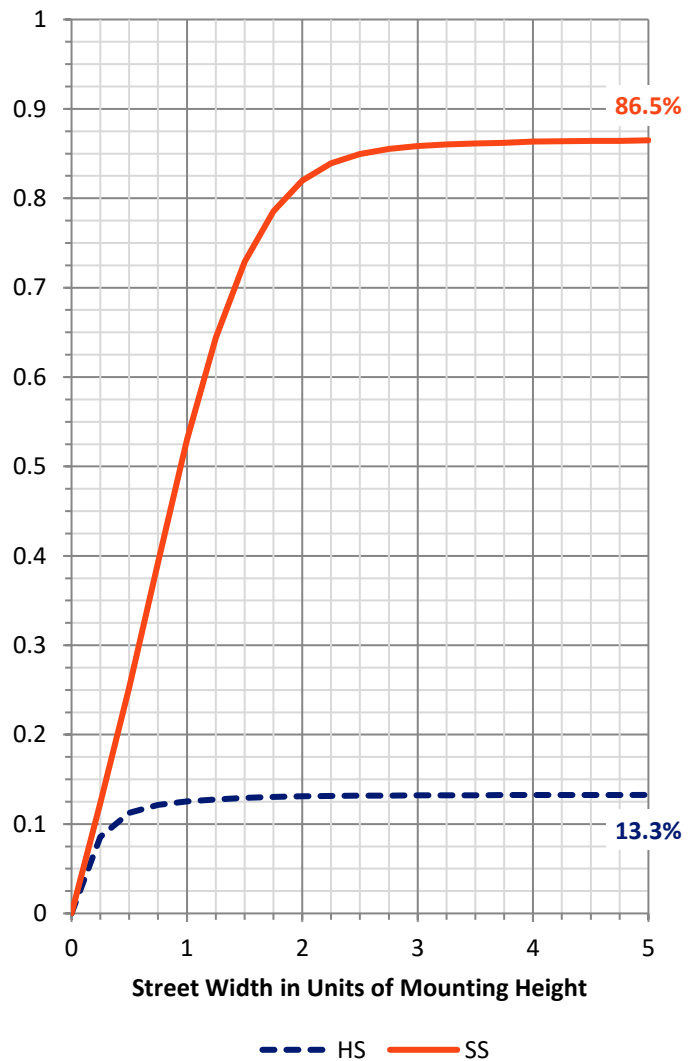
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	958.8	0.0	958.8
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6211.2	0.0	6211.2
	% Fixture	86.6	0.0	86.6
Total	Lumens	7170.0	0.0	7170.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.1
10°-20°	208.7	2.9
20°-30°	395.4	5.5
30°-40°	800.2	11.2
40°-50°	1363.1	19.0
50°-60°	1853.7	25.9
60°-70°	1740.7	24.3
70°-80°	697.4	9.7
80°-90°	33.8	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°	7170.0	100.0
0°-180°	7170.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882238

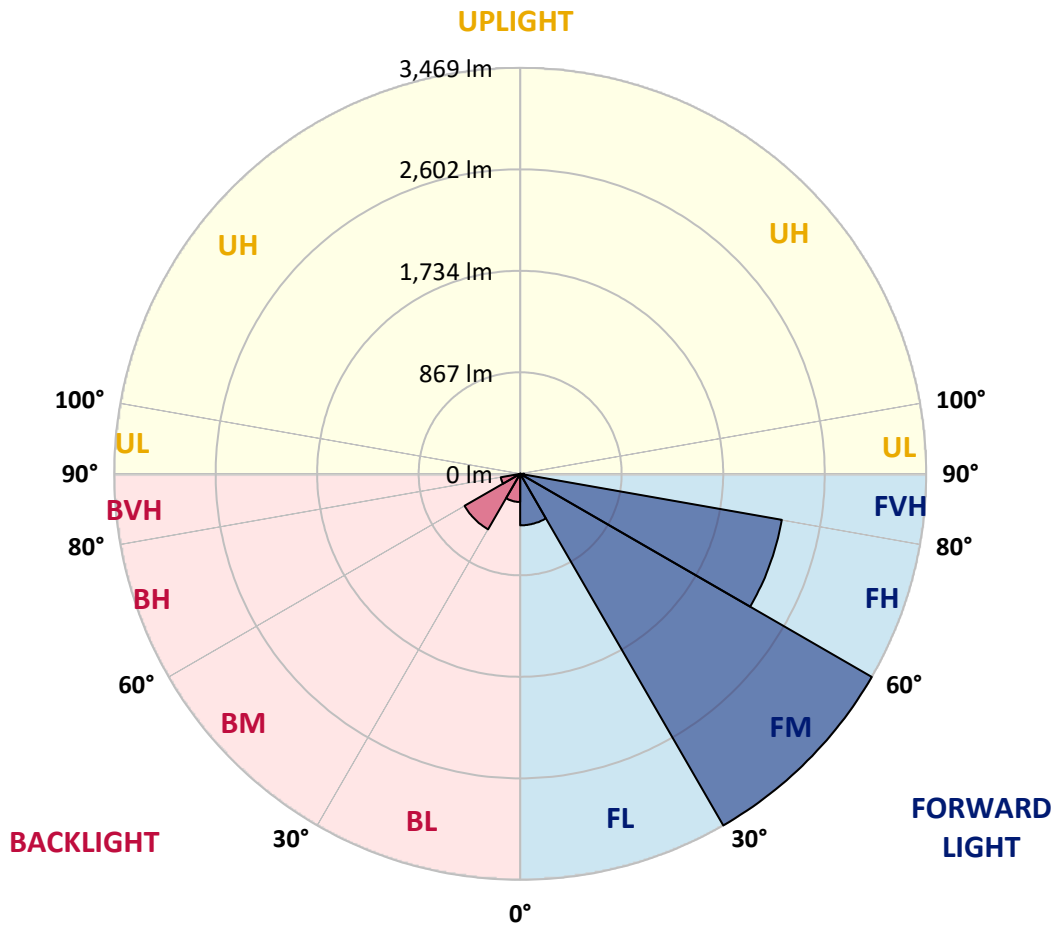
CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	440.3	6.1			
FM (30°-60°)	3468.8	48.4			
FH (60°-80°)	2269.9	31.7			G2/5000
FVH (80°-90°)	32.1	0.4			G1/100
BL (0°-30°)	240.7	3.4	B1/500		
BM (30°-60°)	548.2	7.6	B1/1000		
BH (60°-80°)	168.3	2.3	B1/500		G1/500
BVH (80°-90°)	1.6	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-G2

Type III Short



REPORT NUMBER: P882238

CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	831.1	836.8	835.4	833.9	833.5	834.4	834.9	834.4	834.4	834.4	834.9
5°	815.2	820.0	820.0	823.4	828.2	833.9	838.3	839.2	840.2	841.6	841.2
7.5°	784.9	788.8	791.6	802.7	814.7	830.1	843.1	849.8	850.8	856.1	858.0
10°	764.2	769.1	773.9	785.4	802.7	825.8	847.9	864.2	866.6	879.1	884.9
12.5°	763.3	768.1	774.3	786.8	807.0	831.5	858.5	882.0	886.3	904.6	916.6
15°	773.4	779.2	784.9	800.3	821.9	851.7	880.6	909.9	914.2	940.2	953.1
17.5°	794.1	801.7	806.1	821.4	844.5	877.7	915.7	949.3	953.1	983.4	999.8
20°	834.9	844.0	845.5	858.0	880.6	916.1	961.3	1003.1	1007.9	1042.6	1060.8
22.5°	919.5	932.5	920.9	927.2	947.4	983.0	1032.0	1084.9	1091.6	1131.0	1147.3
25°	1068.5	1086.8	1057.0	1046.4	1055.0	1092.1	1153.6	1220.4	1228.1	1259.8	1268.0
27.5°	1361.2	1337.7	1292.5	1248.3	1222.3	1243.5	1312.7	1395.4	1405.0	1435.7	1426.1
30°	1682.8	1662.1	1601.1	1503.0	1441.5	1438.1	1502.1	1594.3	1605.4	1634.7	1605.4
32.5°	2004.8	1985.1	1918.8	1798.1	1691.4	1638.6	1682.8	1785.2	1790.9	1809.7	1766.4
35°	2321.6	2301.4	2235.1	2111.5	1980.3	1860.2	1851.5	1966.9	1968.8	1988.5	1924.1
37.5°	2640.3	2623.4	2552.8	2431.7	2302.4	2136.5	2056.3	2138.9	2141.3	2160.6	2093.8
40°	2867.6	2874.8	2826.3	2732.6	2621.5	2440.3	2286.0	2322.1	2307.6	2339.9	2300.0
42.5°	3062.8	3077.2	3034.9	2987.8	2923.4	2763.8	2570.6	2564.3	2541.3	2558.6	2517.2
45°	3231.5	3243.5	3205.5	3194.5	3193.0	3081.0	2881.6	2844.1	2811.9	2808.5	2759.0
47.5°	3293.5	3316.6	3332.9	3369.9	3442.0	3394.9	3203.1	3145.0	3108.9	3082.5	3004.1
50°	3317.0	3341.5	3397.3	3505.0	3675.6	3695.8	3523.2	3457.9	3413.6	3365.6	3250.2
52.5°	3285.3	3329.1	3404.0	3585.2	3832.8	3937.1	3830.4	3773.2	3722.7	3644.4	3473.3
55°	3098.3	3142.1	3295.4	3584.3	3911.1	4106.3	4120.7	4095.2	4038.5	3915.0	3653.5
57.5°	2704.2	2769.1	3011.8	3462.2	3909.7	4251.9	4405.3	4423.5	4360.1	4183.2	3795.3
60°	2158.2	2246.1	2542.2	3191.6	3789.0	4330.7	4654.7	4746.0	4678.7	4447.5	3910.2
62.5°	1505.9	1607.8	1888.0	2767.6	3513.1	4274.0	4836.9	5005.6	4954.6	4684.0	3954.4
65°	918.5	951.2	1177.1	2177.9	3044.0	4036.6	4893.1	5145.9	5129.1	4828.7	3889.0
67.5°	611.9	639.3	704.2	1493.4	2362.9	3562.2	4758.5	5121.4	5126.2	4805.2	3649.7
70°	368.7	392.2	434.5	868.6	1531.4	2819.6	4341.8	4809.0	4836.9	4490.3	3195.9
72.5°	151.9	167.8	206.2	393.7	793.1	1789.5	3457.4	4128.9	4193.8	3775.6	2452.8
75°	86.0	94.2	121.1	197.6	344.2	833.9	2094.2	2931.1	3026.7	2602.3	1475.6
77.5°	57.2	61.0	78.3	127.9	193.7	284.6	895.0	1527.1	1709.7	1421.3	638.8
80°	38.5	41.8	53.8	85.6	125.9	122.1	285.0	565.7	696.0	488.4	155.7
82.5°	26.0	26.4	38.5	56.2	79.8	59.1	84.1	175.9	221.1	141.3	59.1
85°	14.9	14.4	28.4	32.7	35.6	24.5	25.5	52.9	69.2	59.6	33.6
87.5°	1.9	2.9	11.1	8.7	4.8	5.3	5.3	9.1	13.5	14.4	7.2
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: P882238

CATALOG NUMBER: NAV-SB2A-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	834.9	834.4	833.0	831.5	828.2	826.3	827.2	826.3	825.8	826.3	828.2
5°	841.2	839.7	835.9	831.1	824.3	816.2	810.9	803.2	796.0	791.6	792.6
7.5°	858.0	856.5	851.2	837.8	816.2	782.0	750.8	723.4	702.7	690.7	691.2
10°	884.9	882.5	874.3	844.5	787.8	713.3	651.3	599.9	566.2	550.4	548.9
12.5°	916.6	913.7	899.3	838.3	734.0	617.6	532.1	474.9	443.6	429.7	428.3
15°	954.1	950.3	921.9	808.5	655.6	511.9	433.6	390.8	370.6	358.1	358.6
17.5°	1000.7	994.0	938.7	763.8	570.5	431.2	373.0	340.8	323.0	311.0	310.0
20°	1061.3	1050.2	952.2	710.4	492.2	380.2	332.1	305.2	291.8	281.2	279.3
22.5°	1145.9	1130.0	968.5	652.7	436.9	345.1	301.9	282.1	271.1	259.1	257.2
25°	1250.7	1231.9	988.7	599.4	398.9	314.8	279.7	263.4	250.4	236.5	235.0
27.5°	1397.3	1363.6	1012.8	555.6	366.3	288.9	259.6	241.3	226.4	214.9	212.5
30°	1560.7	1505.4	1033.9	529.2	336.5	264.8	233.1	214.9	200.9	192.7	191.3
32.5°	1715.5	1640.5	1047.8	517.7	309.5	237.4	204.3	184.6	174.0	171.6	173.0
35°	1861.6	1762.6	1046.4	506.6	285.5	210.0	175.9	155.7	147.6	149.0	149.0
37.5°	2029.8	1892.8	1036.3	489.3	265.8	185.1	151.4	133.6	126.4	126.9	128.8
40°	2225.5	2043.3	1030.1	456.6	244.2	162.0	131.2	116.8	111.5	109.6	109.1
42.5°	2434.1	2188.9	1031.0	419.6	217.3	141.3	117.3	105.3	100.5	99.0	98.5
45°	2643.6	2327.8	1032.5	381.2	188.9	125.5	107.2	97.1	94.2	92.3	92.3
47.5°	2840.7	2446.1	1005.5	339.8	161.0	113.4	99.0	92.3	89.9	87.5	87.5
50°	3024.3	2524.9	940.7	291.8	138.9	103.8	92.8	88.0	85.6	83.2	83.2
52.5°	3167.1	2537.4	833.5	242.3	123.5	96.6	88.9	84.6	81.7	79.3	78.8
55°	3230.5	2459.1	681.1	196.1	111.5	90.4	85.1	80.8	77.4	75.0	74.5
57.5°	3214.2	2294.2	531.1	157.7	100.0	84.1	80.3	77.4	73.5	69.7	69.2
60°	3133.9	2073.6	400.4	131.2	89.4	77.4	75.0	72.6	67.3	61.5	60.6
62.5°	2995.0	1796.2	285.5	108.6	77.9	69.7	68.7	66.8	59.1	48.5	47.6
65°	2782.5	1459.3	192.3	90.4	66.8	61.0	61.5	58.2	48.1	36.0	35.1
67.5°	2472.0	1067.1	123.0	74.0	55.8	50.9	51.4	49.5	40.9	30.8	29.3
70°	2076.5	706.6	80.3	56.2	44.7	39.4	42.3	42.8	34.6	25.0	24.0
72.5°	1522.3	417.2	56.2	41.8	32.7	27.4	34.6	35.6	27.9	18.7	17.8
75°	867.6	198.0	42.3	30.3	20.2	19.2	26.9	26.9	19.2	12.5	11.5
77.5°	364.3	82.7	29.8	19.7	11.5	11.1	18.3	16.8	9.6	5.8	5.8
80°	105.3	37.0	15.9	9.6	4.8	4.3	7.2	5.3	2.4	1.0	1.0
82.5°	41.3	16.3	6.2	3.8	1.9	1.9	1.0	0.0	0.0	0.0	0.0
85°	24.5	6.7	2.9	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	1.4	1.0	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)