

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: P960023

Luminaire Tested: **NAV-SB1B-835-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-835-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5345.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 39.8
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



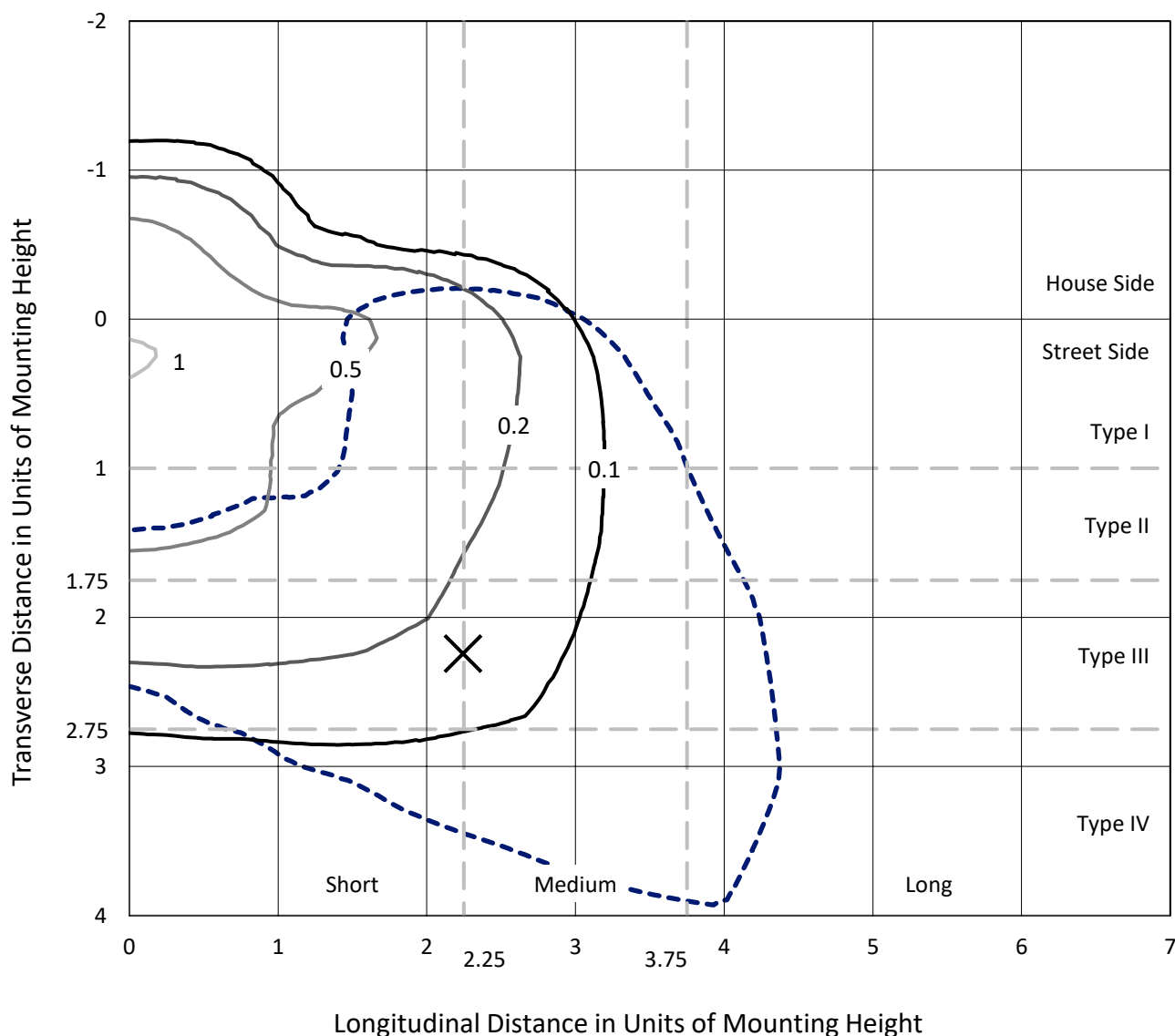
REPORT NUMBER: P960023

CATALOG NUMBER: NAV-SB1B-835-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

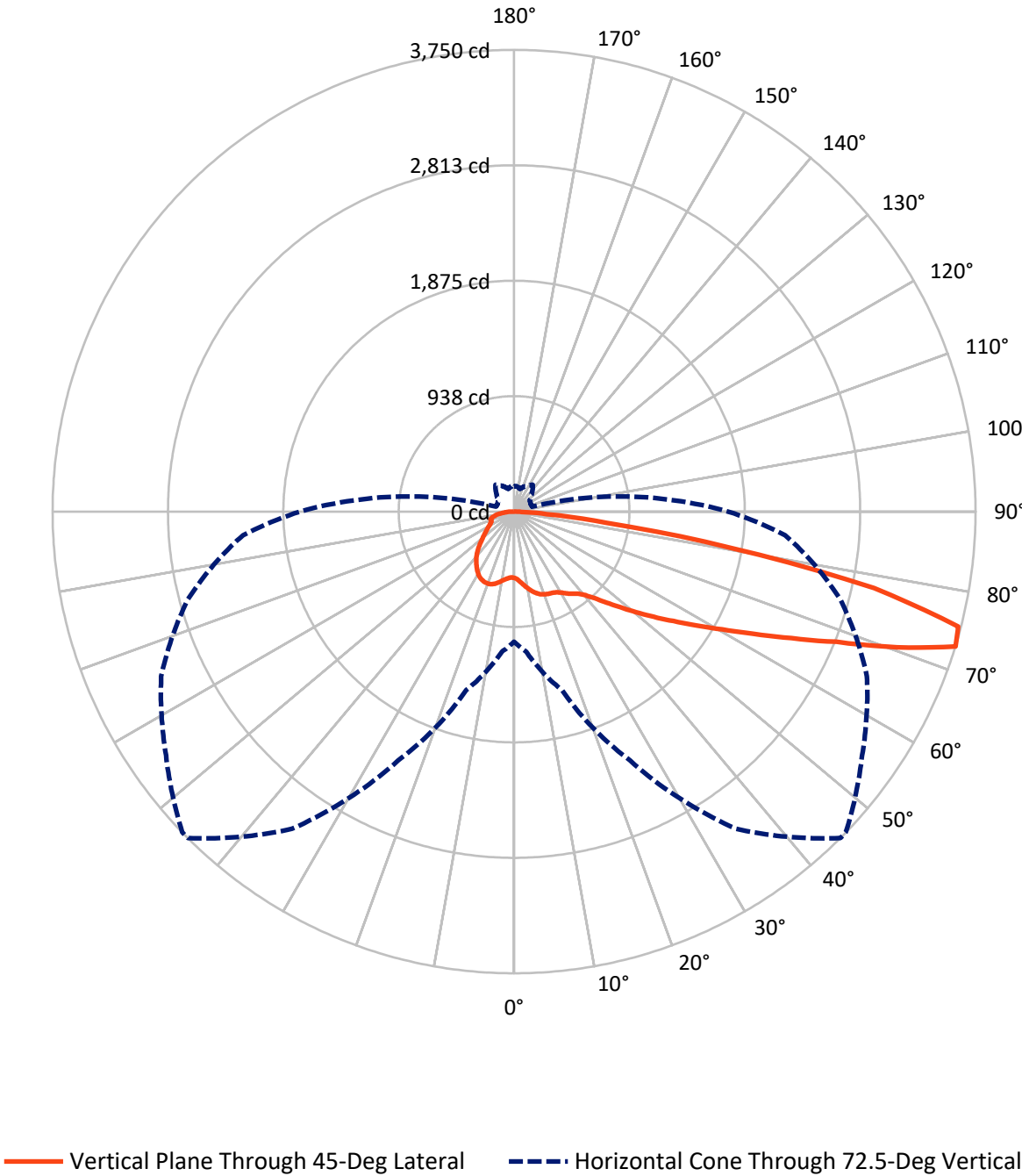


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc

Type IV - Short - N/A

REPORT NUMBER: P960023
CATALOG NUMBER: NAV-SB1B-835-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P960023

CATALOG NUMBER: NAV-SB1B-835-U-T4W

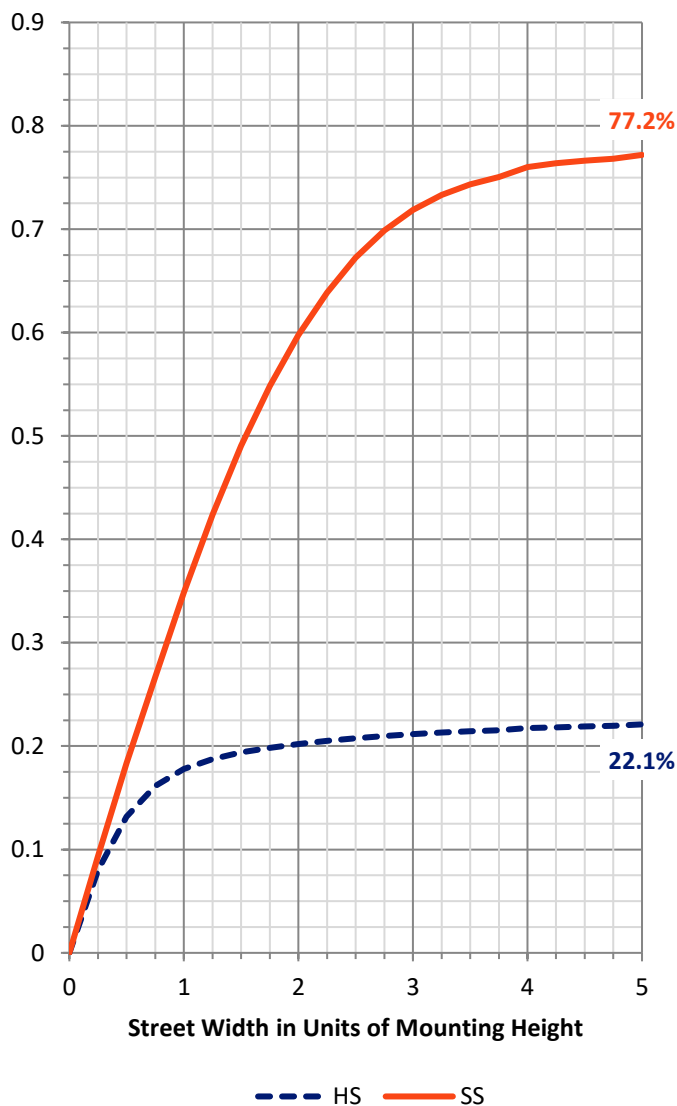
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1208.4	0.0	1208.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	4137.0	0.0	4137.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	5345.4	0.0	5345.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.0
10°-20°	183.0	3.4
20°-30°	318.3	6.0
30°-40°	456.3	8.5
40°-50°	642.5	12.0
50°-60°	984.2	18.4
60°-70°	1425.7	26.7
70°-80°	1138.5	21.3
80°-90°	141.8	2.7
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°	5345.4	100.0
0°-180°	5345.4	100.0

Coefficient of Utilization



REPORT NUMBER: P960023

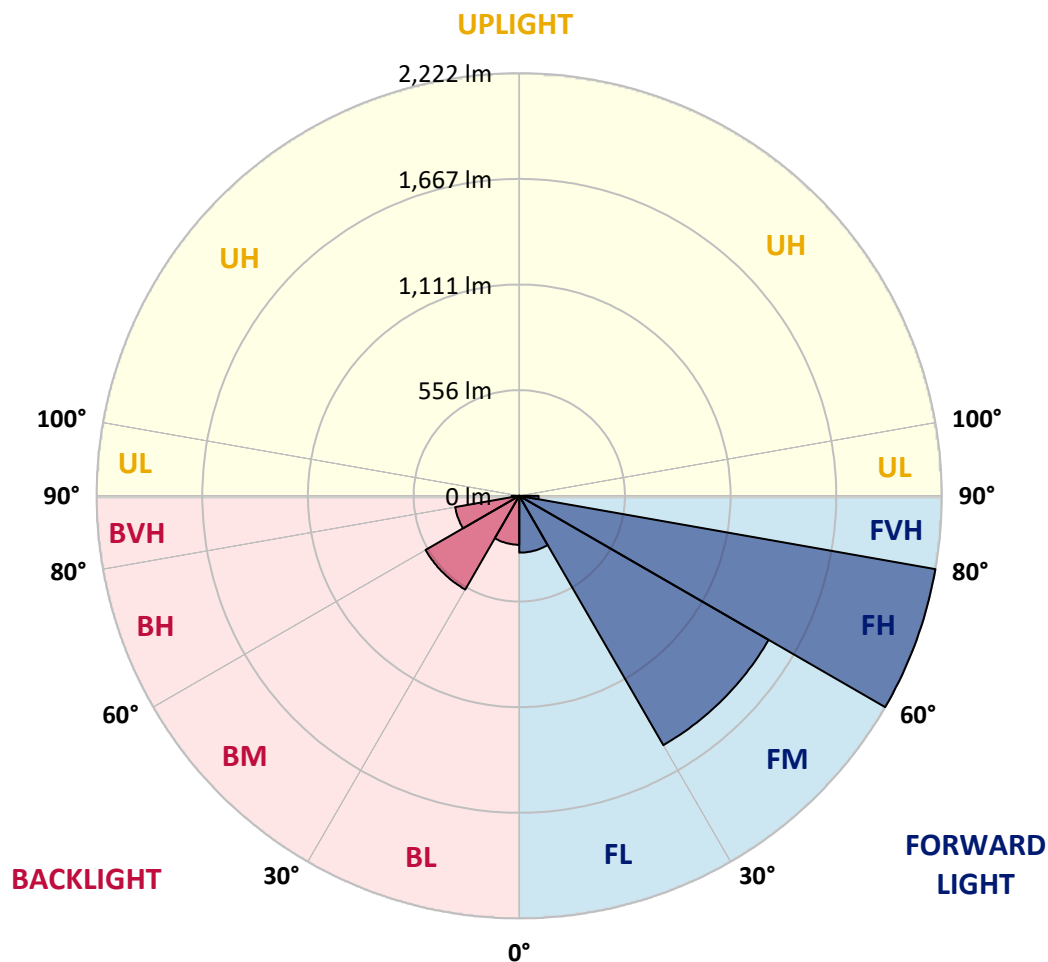
CATALOG NUMBER: NAV-SB1B-835-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	298.9	5.6			
FM	(30°-60°)	1514.1	28.3			
FH	(60°-80°)	2222.2	41.6			G2/5000
FVH	(80°-90°)	101.7	1.9			G2/225
BL	(0°-30°)	257.3	4.8	B1/500		
BM	(30°-60°)	569.0	10.6	B1/1000		
BH	(60°-80°)	342.1	6.4	B1/500		G1/500
BVH	(80°-90°)	40.1	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



REPORT NUMBER: P960023

CATALOG NUMBER: NAV-SB1B-835-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3
2.5°	560.4	564.1	560.7	557.5	556.2	552.5	552.2	549.9	548.6	544.6	543.5
5°	599.5	604.3	598.7	592.4	586.8	577.8	576.7	570.2	562.9	554.4	549.7
7.5°	643.7	647.9	641.4	632.2	622.3	607.4	607.1	595.3	583.7	569.4	561.2
10°	682.3	687.9	679.2	666.6	654.2	637.2	635.3	621.8	607.1	588.6	576.2
12.5°	716.4	720.3	711.9	696.4	682.0	665.1	662.6	647.7	631.3	610.2	594.4
15°	743.4	748.5	737.2	720.6	705.4	688.8	686.5	673.0	656.7	634.4	614.2
17.5°	761.2	765.4	753.8	735.2	720.6	706.8	705.1	693.8	679.5	656.9	635.3
20°	767.9	772.4	760.2	741.4	728.0	717.2	716.4	708.2	698.3	677.8	655.8
22.5°	774.7	778.9	763.1	743.4	731.5	724.8	724.6	719.1	715.2	698.3	676.9
25°	802.0	803.1	782.0	753.6	736.7	730.7	730.4	730.2	731.8	718.6	699.8
27.5°	825.6	825.3	807.3	780.5	754.4	742.0	741.7	744.6	749.9	738.9	723.4
30°	860.3	857.2	835.8	807.9	783.9	764.8	763.1	760.6	764.8	756.0	747.0
32.5°	933.8	923.9	889.3	839.7	808.4	793.8	791.5	775.8	777.5	772.1	767.6
35°	1039.0	1026.1	979.9	900.0	838.9	818.1	816.9	796.9	793.6	788.7	790.4
37.5°	1164.4	1148.3	1094.5	987.3	891.2	846.1	844.5	826.5	812.6	807.6	817.1
40°	1290.3	1270.0	1225.5	1093.7	968.4	893.2	887.9	860.5	844.8	836.3	856.6
42.5°	1412.4	1395.5	1357.5	1213.1	1063.5	961.9	950.1	903.3	891.5	883.7	920.2
45°	1520.6	1505.4	1477.5	1340.6	1175.1	1055.4	1043.9	967.5	963.9	963.9	1016.8
47.5°	1608.4	1605.0	1575.5	1470.8	1306.6	1161.8	1141.8	1056.8	1066.6	1081.9	1153.9
50°	1705.9	1696.6	1665.0	1598.9	1461.1	1283.8	1267.4	1166.3	1203.2	1244.9	1352.2
52.5°	1795.4	1800.5	1765.3	1732.4	1635.8	1419.7	1391.0	1295.6	1375.2	1444.2	1584.5
55°	1887.5	1887.7	1877.9	1873.4	1818.8	1570.1	1538.6	1451.0	1577.8	1663.4	1855.4
57.5°	1973.9	1974.5	1989.1	2028.9	2031.1	1743.6	1707.9	1641.9	1802.8	1890.0	2134.8
60°	2051.1	2055.0	2095.0	2188.0	2217.8	1942.4	1908.7	1867.5	2035.3	2123.2	2428.4
62.5°	2077.0	2091.4	2180.4	2312.4	2402.3	2186.2	2153.0	2128.5	2279.7	2361.4	2674.0
65°	2033.1	2066.0	2238.1	2415.2	2592.0	2476.0	2443.1	2416.3	2533.7	2610.6	2875.6
67.5°	1925.3	1967.8	2234.7	2523.0	2822.3	2824.6	2793.9	2731.1	2806.0	2835.6	2941.2
70°	1641.1	1704.8	2037.9	2563.3	3086.8	3301.3	3271.8	3110.2	3077.8	2934.7	2756.5
72.5°	1057.4	1143.0	1500.6	2231.8	3145.6	3750.0	3748.2	3452.3	3163.7	2742.1	2210.7
75°	385.8	438.2	697.2	1400.9	2640.5	3727.1	3738.1	3393.7	2887.9	2118.2	1377.3
77.5°	140.5	153.8	227.6	538.4	1623.9	2990.4	3013.3	2713.1	2055.6	1063.0	545.7
80°	73.8	81.1	116.5	208.9	695.8	1776.0	1811.8	1612.4	966.2	320.2	163.6
82.5°	40.8	44.2	65.3	113.5	313.4	759.4	780.8	636.9	339.9	135.7	67.5
85°	21.9	23.4	30.6	61.9	153.1	263.3	269.2	190.3	135.4	79.6	32.7
87.5°	6.5	7.9	10.1	19.7	60.0	59.1	60.6	37.7	53.5	40.3	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

REPORT NUMBER: P960023

CATALOG NUMBER: NAV-SB1B-835-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3	539.3
2.5°	541.8	540.9	537.8	536.4	534.7	534.4	535.9	536.2	536.4	536.7	537.8
5°	546.8	544.1	541.2	539.6	540.1	540.4	543.1	545.2	546.5	547.7	548.3
7.5°	556.7	554.4	549.7	549.4	550.2	552.8	556.5	560.9	563.4	565.4	566.0
10°	571.3	567.1	561.5	562.3	564.1	567.6	575.3	578.9	583.1	586.8	586.0
12.5°	586.3	582.6	576.2	576.7	579.5	586.0	593.3	597.8	600.6	603.4	604.5
15°	605.7	599.2	592.1	592.1	597.3	604.3	607.6	611.3	613.1	616.1	617.3
17.5°	625.7	617.3	607.9	607.4	613.6	616.9	618.9	619.5	620.0	623.4	624.5
20°	645.6	636.4	623.2	622.1	623.4	622.9	622.6	622.1	622.9	627.1	628.8
22.5°	665.4	654.7	636.4	631.3	627.4	622.1	621.8	621.5	622.1	626.3	629.0
25°	688.5	675.6	651.1	635.8	622.6	615.3	616.1	616.4	616.9	620.3	624.8
27.5°	713.5	699.2	664.5	634.4	610.5	605.5	604.0	604.9	606.8	612.1	617.6
30°	738.6	721.7	676.9	628.8	595.3	588.2	583.7	585.7	591.9	597.3	603.2
32.5°	761.4	744.6	686.7	616.4	575.8	564.9	558.9	561.5	567.6	569.7	576.7
35°	788.1	769.1	691.1	596.7	554.7	537.8	529.9	526.3	529.4	527.5	533.6
37.5°	818.1	798.1	690.4	570.8	529.9	510.6	499.6	485.7	479.3	472.5	476.7
40°	862.2	833.5	683.7	539.6	499.3	481.5	461.8	438.4	423.8	410.5	411.4
42.5°	922.5	882.8	671.3	505.2	464.6	448.0	421.3	393.9	370.8	348.9	347.0
45°	1012.3	947.3	655.8	468.5	427.2	410.8	381.8	351.2	324.9	296.8	293.5
47.5°	1141.8	1034.0	641.1	426.9	387.8	372.8	346.7	318.2	287.2	259.9	256.8
50°	1319.8	1158.5	627.7	386.3	348.9	337.6	316.8	287.8	256.6	234.5	233.2
52.5°	1546.2	1327.7	622.1	347.2	312.5	308.3	291.7	264.7	235.1	216.6	215.1
55°	1806.2	1530.1	622.1	309.8	280.7	282.2	270.6	245.6	220.0	203.3	201.6
57.5°	2071.4	1735.1	610.8	275.1	253.7	259.6	252.4	230.3	207.3	190.0	187.3
60°	2315.8	1906.9	565.2	243.5	229.8	239.0	234.3	215.5	187.3	172.9	170.7
62.5°	2503.7	2003.8	477.3	218.5	210.0	220.8	218.2	195.7	183.6	177.6	175.7
65°	2597.7	1988.0	364.9	196.3	193.4	210.0	204.7	203.9	194.3	187.6	185.3
67.5°	2540.0	1852.3	264.7	179.9	183.9	200.2	220.8	224.2	206.4	193.2	191.0
70°	2286.8	1606.8	197.1	164.4	171.8	200.5	251.7	234.5	202.4	187.0	184.4
72.5°	1739.6	1198.1	152.9	148.1	156.0	201.9	265.6	229.8	191.2	206.6	205.0
75°	994.9	657.7	122.8	128.1	136.3	188.7	258.5	217.4	182.4	189.8	189.8
77.5°	379.4	252.9	101.4	108.4	109.6	164.7	247.2	216.6	173.7	169.5	154.6
80°	131.5	98.8	83.9	86.2	84.8	146.5	237.1	188.4	142.2	127.3	123.1
82.5°	53.8	49.3	66.4	63.7	60.3	113.8	191.5	154.1	116.3	102.8	101.7
85°	23.4	31.3	44.0	38.5	35.0	78.8	153.4	130.4	98.3	84.8	84.5
87.5°	4.8	11.8	18.6	17.4	18.0	52.7	109.0	92.7	69.6	52.1	40.8
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)