

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: P961596

Luminaire Tested: **NAV-SB2A-835-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961596
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8451.1 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

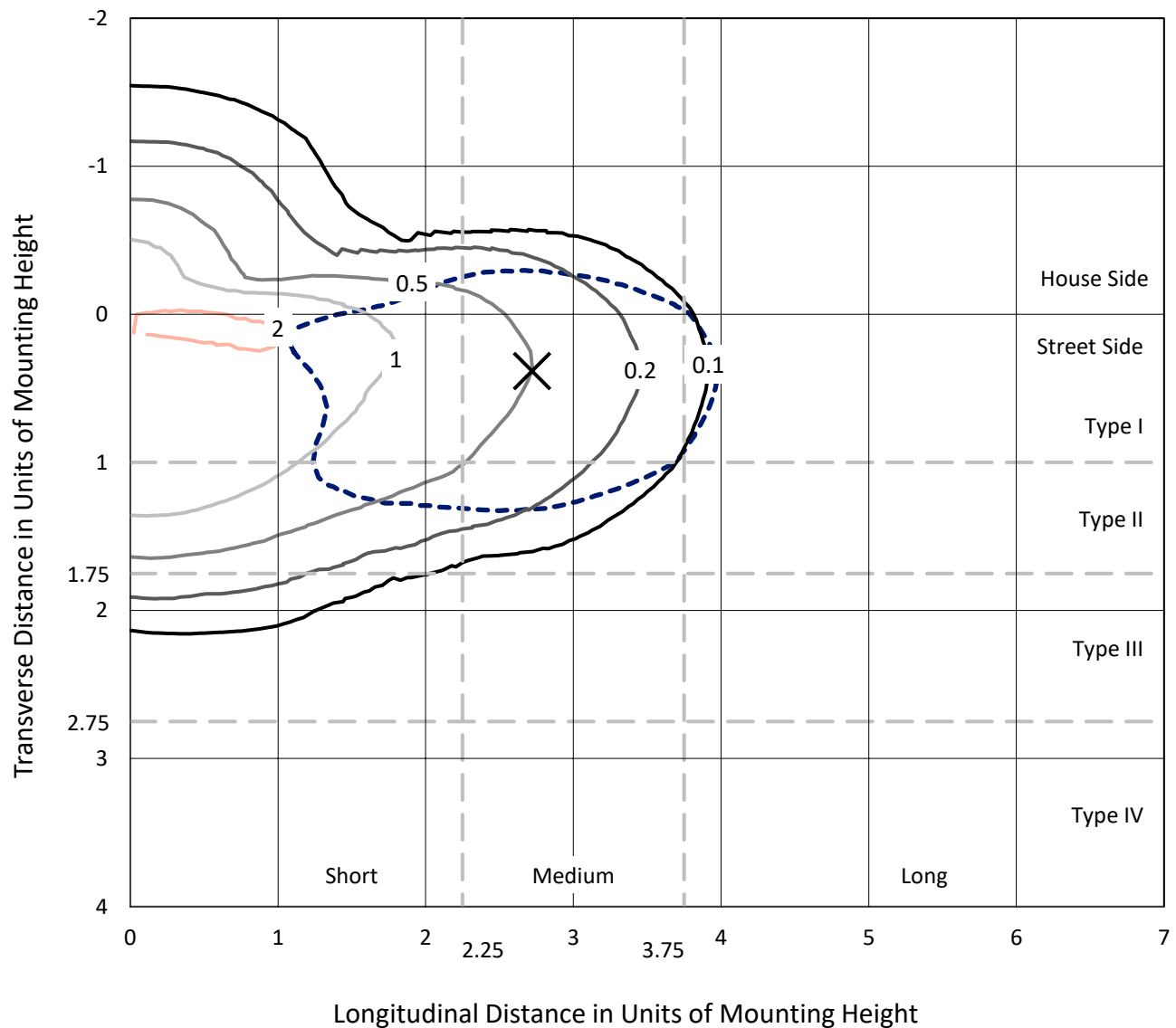
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961596
 CATALOG NUMBER: NAV-SB2A-835-U-T2

Iso-Footcandle Lines of Horizontal Illumination

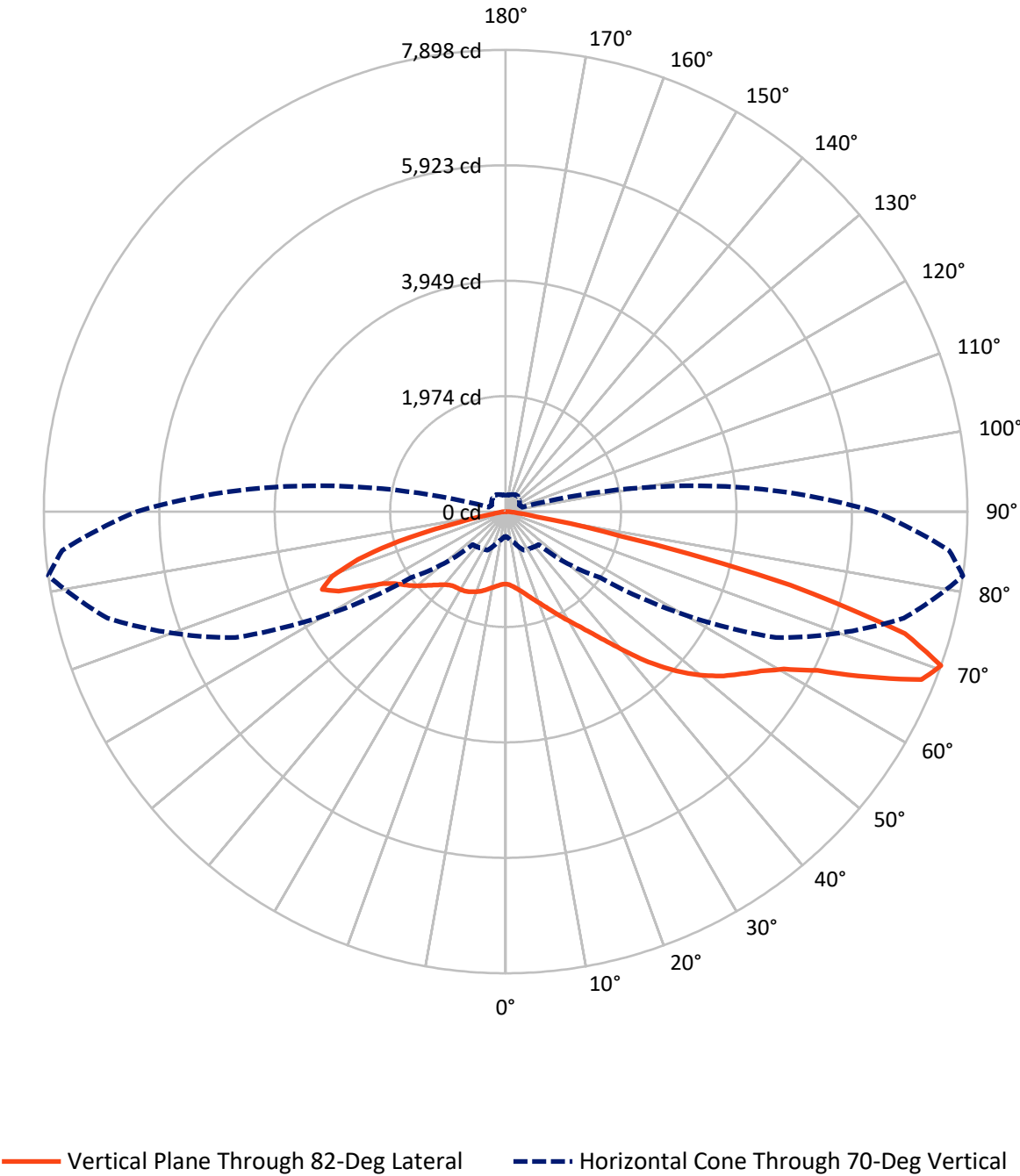
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P961596
CATALOG NUMBER: NAV-SB2A-835-U-T2

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2083.4	0.0	2083.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6367.7	0.0	6367.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	8451.1	0.0	8451.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	1.4
10°-20°	336.1	4.0
20°-30°	562.3	6.7
30°-40°	878.4	10.4
40°-50°	1399.0	16.6
50°-60°	1946.9	23.0
60°-70°	2036.5	24.1
70°-80°	1064.4	12.6
80°-90°	110.5	1.3
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°	8451.1	100.0
0°-180°	8451.1	100.0

Coefficient of Utilization



REPORT NUMBER: P961596

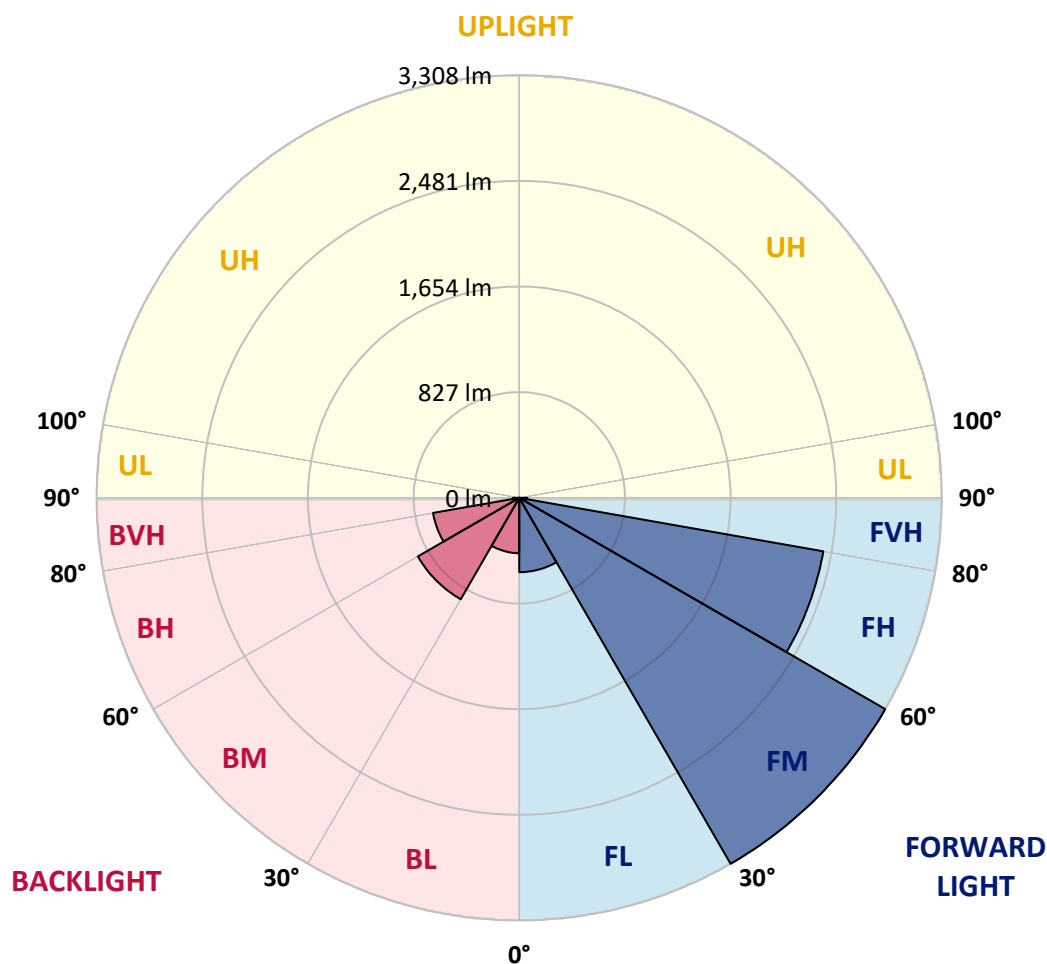
CATALOG NUMBER: NAV-SB2A-835-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	582.0	6.9			
FM	(30°-60°)	3307.7	39.1			
FH	(60°-80°)	2416.2	28.6			G2/5000
FVH	(80°-90°)	61.9	0.7			G1/100
BL	(0°-30°)	433.4	5.1	B1/500		
BM	(30°-60°)	916.6	10.8	B1/1000		
BH	(60°-80°)	684.7	8.1	B2/1000		G2/1000
BVH	(80°-90°)	48.7	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



REPORT NUMBER: P961596

CATALOG NUMBER: NAV-SB2A-835-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0
2.5°	1268.6	1275.8	1273.6	1271.3	1271.3	1268.2	1267.7	1263.2	1259.6	1253.9	1252.4
5°	1284.7	1292.4	1291.5	1293.3	1299.1	1300.5	1301.9	1299.1	1291.9	1284.7	1281.7
7.5°	1270.4	1279.0	1281.7	1292.4	1310.4	1326.5	1338.5	1343.6	1336.8	1326.5	1321.5
10°	1222.0	1231.4	1240.9	1266.4	1298.3	1336.4	1368.7	1388.0	1386.6	1376.7	1368.2
12.5°	1123.8	1133.6	1153.8	1203.7	1261.9	1329.2	1389.3	1429.7	1443.5	1436.3	1421.6
15°	1045.3	1053.8	1069.1	1120.2	1196.0	1298.3	1396.9	1475.4	1510.7	1506.7	1488.8
17.5°	1043.0	1046.6	1056.1	1080.2	1138.6	1249.8	1388.8	1520.2	1587.9	1587.5	1565.1
20°	1082.5	1083.8	1089.3	1094.2	1127.4	1213.0	1368.2	1557.4	1674.4	1674.4	1650.2
22.5°	1137.2	1136.3	1141.7	1137.2	1153.4	1209.9	1355.2	1590.2	1770.9	1778.1	1747.5
25°	1219.3	1214.8	1213.5	1203.1	1206.3	1239.0	1369.5	1627.4	1885.3	1900.0	1861.9
27.5°	1328.7	1321.5	1316.6	1292.8	1284.7	1299.1	1413.5	1672.2	2012.6	2038.2	1989.7
30°	1471.3	1458.4	1451.2	1409.9	1380.8	1383.0	1479.9	1731.8	2145.8	2187.0	2125.6
32.5°	1665.9	1645.7	1626.5	1558.8	1505.4	1487.9	1565.5	1814.4	2290.2	2356.1	2277.1
35°	1883.8	1867.8	1847.2	1742.6	1660.6	1620.2	1681.2	1929.7	2459.3	2563.7	2461.0
37.5°	2093.8	2079.8	2089.8	1948.9	1843.1	1784.3	1832.8	2084.3	2667.8	2822.0	2691.5
40°	2310.9	2300.1	2301.4	2166.8	2043.5	1977.6	2016.6	2278.6	2906.8	3129.2	2968.7
42.5°	2546.7	2538.6	2511.8	2392.5	2253.9	2192.5	2228.4	2502.7	3163.3	3479.0	3272.7
45°	2810.9	2805.9	2780.8	2644.0	2485.2	2416.2	2464.6	2750.3	3421.1	3808.2	3578.1
47.5°	3039.1	3043.1	3039.9	2924.7	2760.1	2658.8	2716.7	3008.6	3661.1	4117.6	3870.9
50°	3148.9	3170.0	3201.0	3165.1	3062.8	2959.7	2971.0	3258.0	3889.8	4407.7	4151.7
52.5°	3091.5	3131.5	3215.7	3273.1	3312.6	3291.1	3261.0	3505.5	4105.0	4669.6	4417.1
55°	2877.7	2933.7	3073.6	3212.1	3413.6	3570.1	3609.5	3779.9	4314.9	4900.1	4668.3
57.5°	2488.0	2579.0	2704.6	2984.8	3323.9	3705.0	4015.7	4160.7	4537.4	5146.3	4931.1
60°	1819.8	1941.8	2097.8	2514.8	3009.9	3632.8	4361.6	4745.4	4853.5	5465.1	5273.2
62.5°	1164.6	1239.9	1383.4	1776.2	2345.3	3262.9	4467.4	5476.4	5389.3	5988.0	5786.2
65°	797.3	845.7	977.1	1197.8	1516.2	2428.7	4183.9	6024.3	6240.5	6816.8	6663.4
67.5°	579.4	616.1	728.3	921.6	987.9	1437.3	3246.7	5999.2	7067.9	7670.6	7432.0
70°	422.4	448.4	542.6	728.3	760.1	799.6	1966.9	5099.7	7050.0	7897.5	7611.9
72.5°	313.0	331.0	394.2	565.1	615.3	540.0	973.5	3706.4	6058.0	7143.2	6914.0
75°	226.4	240.0	286.6	432.3	492.4	411.2	485.6	2165.9	4225.7	5024.8	5065.1
77.5°	173.1	183.4	213.9	316.6	394.2	308.5	301.3	996.4	2003.7	2013.5	2126.5
80°	139.0	145.8	162.4	222.8	302.3	230.9	196.4	402.2	633.2	535.9	562.3
82.5°	102.3	113.5	137.2	156.5	216.2	159.2	119.7	203.2	240.8	207.2	209.0
85°	58.3	65.9	82.9	112.1	138.2	97.3	68.6	90.1	112.1	91.9	82.1
87.5°	20.6	27.0	29.1	44.0	60.1	40.4	26.4	26.0	36.8	27.4	22.9
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: P961596

CATALOG NUMBER: NAV-SB2A-835-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0	1239.0
2.5°	1248.0	1245.8	1236.8	1224.7	1212.2	1200.1	1196.0	1187.5	1181.6	1178.5	1182.1
5°	1273.2	1266.0	1244.9	1218.0	1189.7	1159.2	1137.6	1118.0	1103.6	1090.2	1095.5
7.5°	1309.0	1296.4	1260.1	1213.0	1162.8	1112.1	1074.5	1045.8	1026.4	1013.9	1016.6
10°	1350.7	1331.4	1275.8	1205.4	1127.8	1055.1	1010.8	986.2	974.1	967.3	969.0
12.5°	1398.7	1371.3	1291.9	1187.9	1074.5	991.5	961.0	953.9	954.3	954.7	955.6
15°	1457.9	1419.7	1304.9	1149.8	1004.9	942.6	937.3	948.9	961.0	966.9	966.4
17.5°	1524.7	1470.9	1307.2	1087.0	936.7	911.2	928.2	953.4	971.8	979.8	981.6
20°	1596.4	1522.9	1291.1	998.2	880.8	885.7	916.1	948.4	968.6	979.0	981.6
22.5°	1678.5	1578.5	1252.4	905.0	835.0	857.8	893.7	925.2	946.2	956.5	959.2
25°	1772.2	1640.8	1192.0	826.5	795.5	826.5	862.3	888.4	905.4	914.8	917.5
27.5°	1876.3	1705.9	1111.2	764.1	761.0	794.2	823.8	844.0	852.9	860.1	862.8
30°	1980.7	1765.0	1013.5	717.1	730.9	762.4	783.4	792.4	795.1	796.4	799.6
32.5°	2093.8	1816.2	910.8	678.0	702.2	731.4	743.9	748.0	735.4	726.9	729.6
35°	2230.5	1870.9	810.4	647.1	674.0	699.2	703.2	699.6	684.8	667.3	668.2
37.5°	2399.6	1939.1	730.1	625.1	647.6	664.1	659.2	658.4	659.7	639.0	640.4
40°	2606.8	2027.9	671.3	608.1	626.1	629.7	615.7	623.3	630.1	598.7	599.5
42.5°	2836.8	2135.1	634.1	596.4	608.1	599.5	578.0	586.6	585.7	544.4	544.0
45°	3071.4	2251.6	621.0	587.9	591.5	574.4	550.7	552.9	534.1	496.9	498.3
47.5°	3304.6	2376.8	629.1	580.8	570.8	551.6	533.2	523.4	495.5	467.7	467.7
50°	3533.3	2508.2	658.8	566.4	542.6	531.4	517.9	500.5	470.9	447.1	445.3
52.5°	3745.3	2640.4	692.0	542.6	507.2	513.9	505.4	485.2	456.0	431.8	432.3
55°	3946.2	2772.7	705.0	509.8	474.0	498.7	493.7	456.5	421.6	401.8	400.1
57.5°	4165.1	2931.9	690.6	468.2	447.1	481.1	462.4	421.1	400.9	386.1	384.8
60°	4468.3	3181.7	659.7	416.6	421.6	455.2	422.9	405.8	383.9	367.3	366.3
62.5°	4971.9	3647.6	609.9	365.5	391.4	416.6	404.1	387.0	364.6	348.4	348.4
65°	5716.2	4295.2	516.2	325.5	357.8	378.9	383.9	366.8	343.5	326.5	327.4
67.5°	6344.1	4701.5	390.6	292.4	323.3	348.4	362.3	345.7	321.1	304.5	304.9
70°	6309.6	4406.4	298.2	259.6	292.8	318.4	336.3	323.3	296.8	281.2	282.5
72.5°	5604.2	3686.2	241.3	226.4	261.9	287.0	308.5	298.7	271.7	256.6	256.6
75°	4117.1	2616.6	192.8	192.8	223.3	254.3	278.1	271.7	247.1	236.4	233.2
77.5°	1735.4	1097.8	151.1	160.1	185.6	218.4	247.9	250.2	228.7	242.2	219.8
80°	461.5	302.7	115.2	126.0	145.8	180.3	215.7	214.8	191.5	179.0	166.4
82.5°	175.8	119.3	82.1	88.8	105.4	138.2	170.9	176.2	152.9	132.3	132.3
85°	67.8	51.1	50.6	53.4	61.4	91.5	129.1	133.7	115.2	97.8	100.9
87.5°	17.5	15.3	18.9	17.9	28.3	48.9	74.0	76.7	70.4	40.8	58.3
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)