

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: P962060

Luminaire Tested: **NAV-SB2B-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

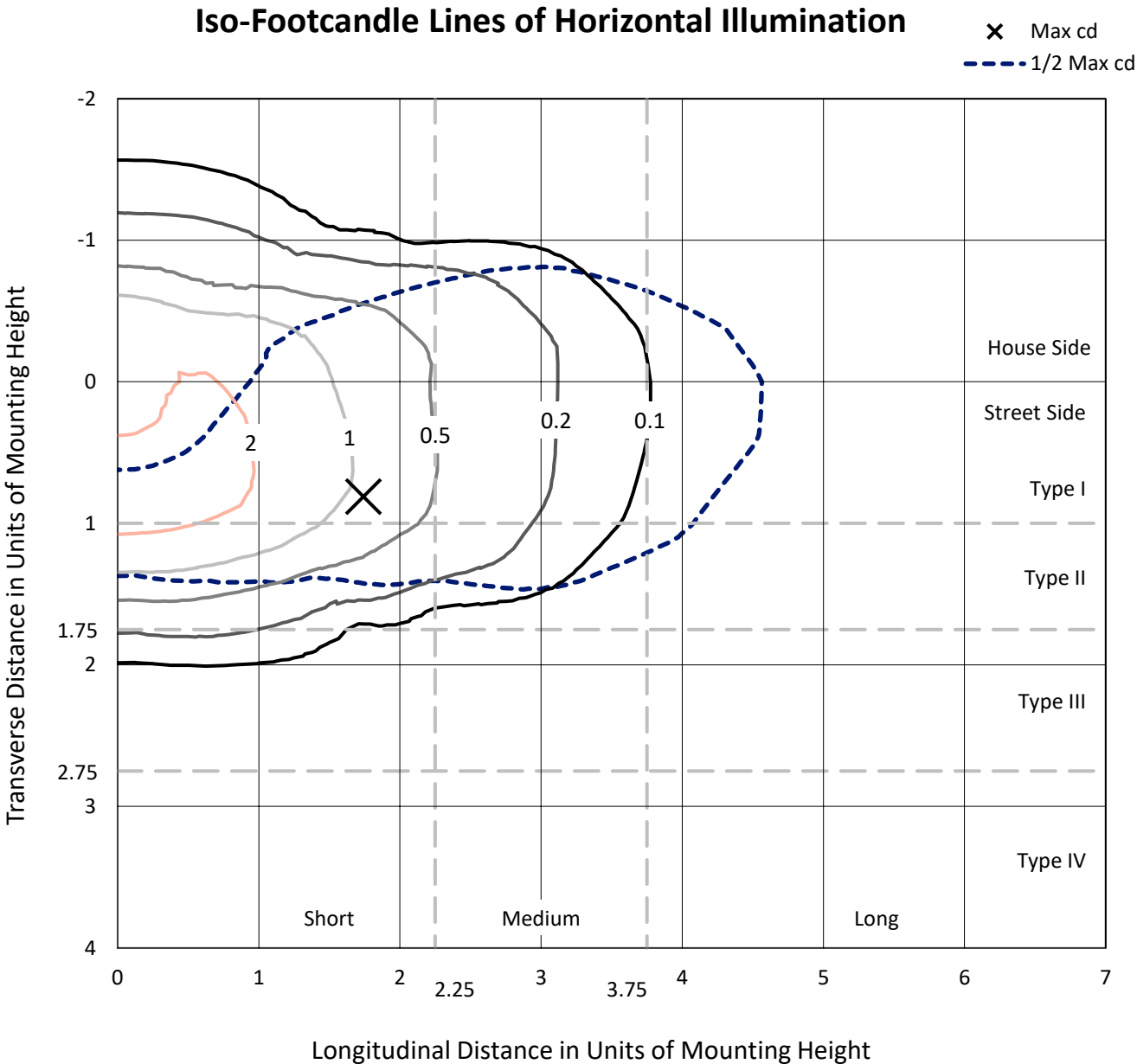
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10171.1 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 73.9
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



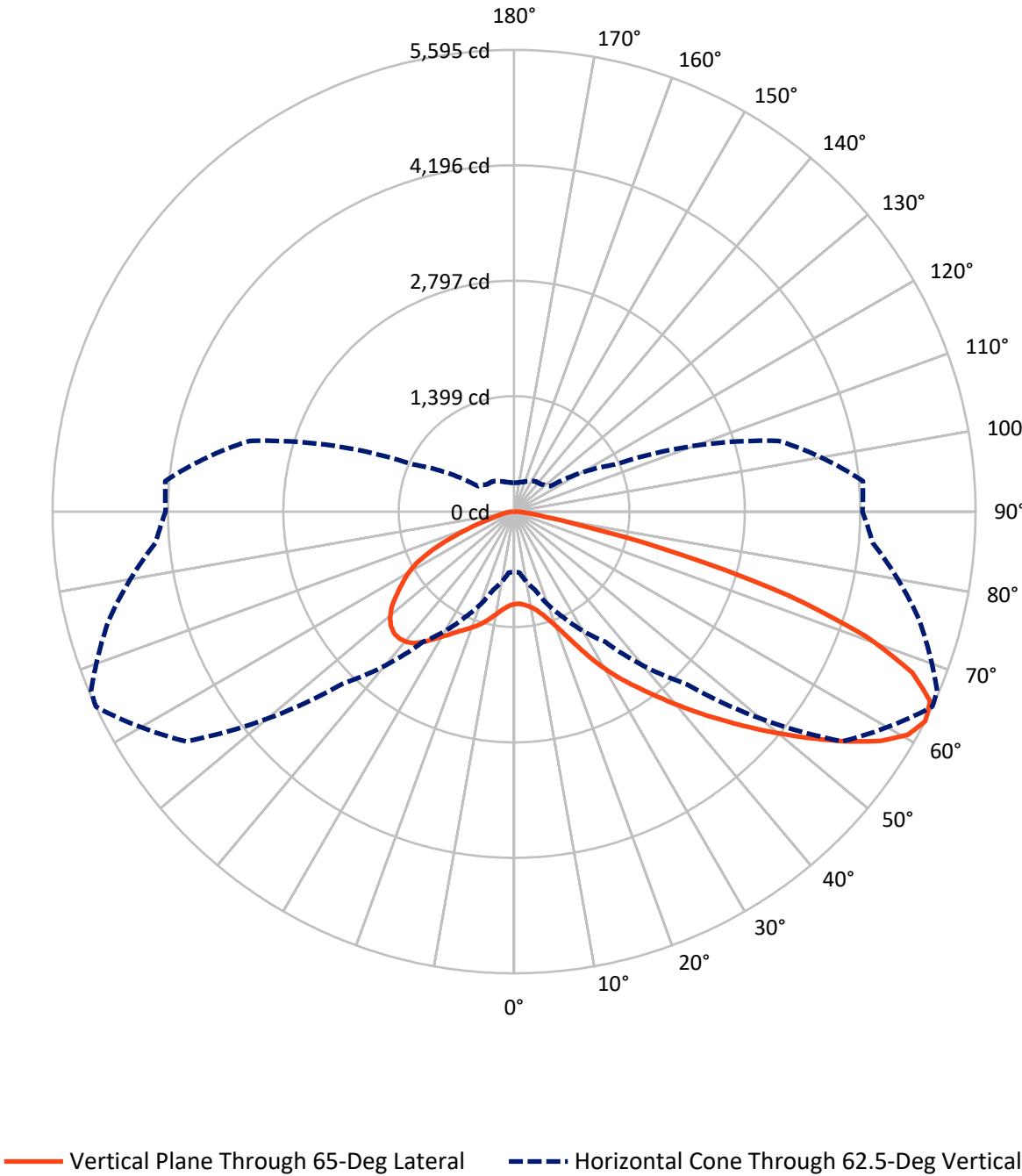
REPORT NUMBER: P962060
CATALOG NUMBER: NAV-SB2B-827-U-T2U



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
Type II - Short - N/A

REPORT NUMBER: P962060
CATALOG NUMBER: NAV-SB2B-827-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P962060

CATALOG NUMBER: NAV-SB2B-827-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3209.5	0.0	3209.5
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	6961.5	0.0	6961.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	10171.1	0.0	10171.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	1.1
10°-20°	378.9	3.7
20°-30°	768.3	7.6
30°-40°	1329.6	13.1
40°-50°	2012.1	19.8
50°-60°	2359.0	23.2
60°-70°	1977.7	19.4
70°-80°	1091.9	10.7
80°-90°	141.8	1.4
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°	10171.1	100.0
0°-180°	10171.1	100.0

Coefficient of Utilization



REPORT NUMBER: P962060

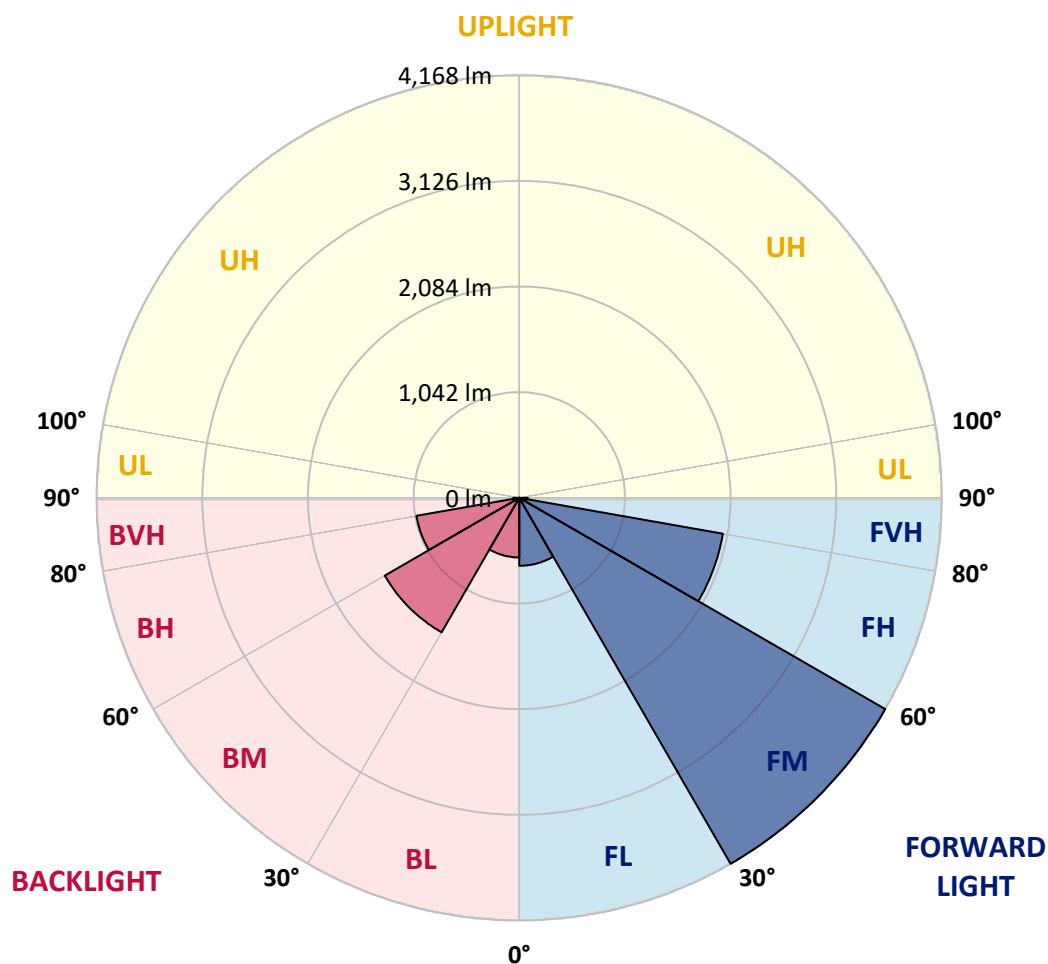
CATALOG NUMBER: NAV-SB2B-827-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	670.4	6.6			
FM	(30°-60°)	4168.4	41.0			
FH	(60°-80°)	2040.0	20.1			G2/5000
FVH	(80°-90°)	82.7	0.8			G1/100
BL	(0°-30°)	588.6	5.8	B2/1000		
BM	(30°-60°)	1532.2	15.1	B2/2500		
BH	(60°-80°)	1029.6	10.1	B3/2500		G3/2500
BVH	(80°-90°)	59.2	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



REPORT NUMBER: P962060

CATALOG NUMBER: NAV-SB2B-827-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8
2.5°	1113.5	1110.3	1112.8	1112.8	1114.0	1113.5	1117.1	1118.2	1119.7	1122.9	1122.9
5°	1102.4	1101.8	1106.6	1110.8	1115.0	1118.7	1123.4	1130.3	1131.4	1135.1	1139.8
7.5°	1098.6	1095.5	1102.9	1108.1	1118.2	1127.1	1139.8	1151.4	1156.2	1157.7	1166.8
10°	1127.1	1121.9	1128.7	1131.9	1140.3	1149.3	1164.1	1182.5	1187.9	1194.1	1204.2
12.5°	1175.7	1169.8	1179.9	1184.7	1192.6	1200.5	1210.5	1228.5	1231.1	1242.7	1252.2
15°	1242.2	1235.3	1241.7	1247.4	1260.6	1268.0	1278.1	1295.5	1295.5	1304.4	1311.3
17.5°	1332.4	1323.5	1328.2	1330.3	1338.8	1349.8	1366.7	1382.0	1389.9	1386.7	1377.3
20°	1467.0	1455.9	1455.9	1445.4	1442.2	1451.1	1473.3	1494.4	1502.9	1486.5	1463.3
22.5°	1669.1	1653.2	1644.3	1608.4	1594.2	1595.2	1617.3	1643.2	1650.0	1621.0	1568.9
25°	1926.1	1901.3	1889.1	1836.4	1804.2	1776.2	1793.6	1826.9	1836.4	1800.5	1716.1
27.5°	2183.0	2184.6	2173.0	2109.7	2056.4	2005.2	1996.3	2031.0	2041.1	2000.5	1895.9
30°	2543.4	2506.0	2483.8	2407.8	2331.9	2260.1	2223.1	2237.4	2240.0	2191.4	2070.1
32.5°	2854.2	2844.8	2797.2	2730.8	2633.1	2520.8	2459.0	2436.3	2432.1	2363.0	2218.9
35°	3208.4	3203.0	3152.9	3073.8	2968.2	2812.1	2700.7	2635.8	2630.6	2533.4	2366.1
37.5°	3568.2	3568.2	3519.1	3432.6	3323.4	3128.1	2958.8	2855.9	2838.9	2712.4	2516.0
40°	3855.3	3837.9	3846.8	3810.4	3685.4	3478.0	3245.3	3095.9	3073.3	2921.2	2675.4
42.5°	4018.3	4012.6	4066.4	4107.0	4055.8	3890.1	3560.8	3356.1	3324.4	3151.4	2859.0
45°	4054.8	4048.4	4144.5	4293.3	4365.1	4297.0	3903.8	3629.9	3591.4	3391.9	3055.8
47.5°	3970.8	3958.1	4099.1	4333.9	4564.0	4683.7	4275.3	3927.1	3871.1	3626.2	3258.0
50°	3718.6	3706.5	3919.7	4231.5	4631.0	4946.5	4678.5	4242.1	4156.6	3877.5	3462.1
52.5°	3170.3	3176.2	3510.2	3938.7	4542.9	5110.1	5025.7	4574.0	4471.0	4134.4	3653.7
55°	2469.5	2482.2	2892.8	3364.6	4190.4	5085.3	5262.7	4915.9	4813.6	4376.1	3851.6
57.5°	1768.3	1824.2	2208.9	2675.9	3513.4	4692.2	5314.3	5241.0	5141.8	4640.0	4045.3
60°	1146.2	1156.2	1552.0	2022.6	2675.4	3993.5	5209.4	5487.4	5409.8	4909.0	4207.2
62.5°	734.5	741.4	982.6	1414.7	1925.6	2954.6	4855.7	5594.6	5570.8	5086.9	4362.9
65°	539.9	534.5	660.1	935.1	1297.0	1822.1	4169.3	5542.8	5589.8	5198.3	4491.7
67.5°	450.7	443.2	505.0	647.5	955.6	1034.8	3084.8	5206.7	5378.7	5185.6	4586.2
70°	410.5	404.2	441.7	480.7	745.6	692.9	1555.1	4526.5	4791.4	5041.6	4570.8
72.5°	347.8	336.7	387.9	426.9	579.9	531.4	642.7	3476.9	3799.9	4579.8	4355.5
75°	269.7	262.3	306.1	375.7	435.8	414.7	406.3	2111.3	2463.8	3541.9	3810.4
77.5°	213.7	203.7	243.7	292.8	392.1	312.9	296.0	909.2	1258.5	2261.1	2851.1
80°	160.9	152.0	185.2	231.6	301.3	235.9	191.6	370.9	474.4	1145.6	1433.8
82.5°	114.5	106.6	129.3	169.9	202.6	211.6	117.7	207.9	233.8	441.7	320.3
85°	73.4	68.6	86.5	106.6	128.7	136.1	71.8	108.8	119.2	182.0	133.5
87.5°	40.1	32.7	46.4	49.6	59.7	54.3	34.3	39.6	42.7	66.0	56.5
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: P962060

CATALOG NUMBER: NAV-SB2B-827-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8	1120.8
2.5°	1125.0	1126.6	1131.9	1133.4	1137.1	1142.0	1145.1	1148.2	1148.2	1151.4	1151.4
5°	1140.3	1144.0	1155.1	1160.9	1170.4	1179.9	1185.7	1192.6	1196.8	1198.9	1200.0
7.5°	1169.8	1175.7	1191.6	1201.5	1217.9	1231.1	1240.0	1249.6	1251.6	1257.5	1255.3
10°	1210.0	1216.9	1234.8	1253.8	1273.4	1289.7	1298.2	1304.9	1307.6	1308.6	1306.1
12.5°	1255.9	1265.9	1289.1	1312.4	1332.9	1347.2	1349.3	1347.7	1340.3	1334.0	1334.0
15°	1312.4	1321.3	1347.2	1372.5	1392.6	1395.2	1382.0	1373.6	1364.6	1363.0	1363.0
17.5°	1379.9	1384.7	1408.4	1433.2	1434.8	1425.8	1406.3	1398.4	1389.9	1384.2	1384.7
20°	1458.6	1456.9	1473.8	1484.4	1473.3	1445.9	1416.3	1403.1	1394.7	1387.8	1388.4
22.5°	1552.5	1540.4	1538.2	1535.6	1506.0	1448.5	1408.4	1391.5	1378.3	1368.8	1372.0
25°	1689.1	1642.7	1610.5	1592.5	1526.1	1434.3	1383.0	1345.6	1320.8	1304.4	1310.8
27.5°	1860.1	1782.0	1700.8	1656.9	1526.1	1405.3	1321.8	1261.2	1220.6	1203.7	1212.1
30°	2023.1	1941.4	1821.5	1734.5	1522.3	1357.7	1223.1	1138.8	1091.2	1074.4	1084.3
32.5°	2162.4	2073.3	1949.8	1819.5	1513.4	1280.7	1100.7	1007.4	961.4	941.4	951.4
35°	2291.8	2196.8	2078.6	1912.9	1489.6	1167.8	966.2	894.9	843.8	811.6	822.2
37.5°	2424.2	2311.3	2200.5	1997.3	1446.9	1035.9	862.7	802.1	741.9	698.6	710.2
40°	2568.2	2433.1	2330.7	2047.4	1376.8	910.3	782.6	727.1	663.3	617.4	626.4
42.5°	2736.5	2579.3	2475.9	2073.3	1280.7	821.1	730.3	676.0	615.8	578.3	585.7
45°	2912.3	2740.2	2608.3	2072.8	1173.6	779.4	713.4	659.6	593.2	554.1	560.4
47.5°	3096.4	2908.6	2722.9	2039.0	1080.7	785.2	704.0	624.2	550.9	512.9	518.2
50°	3281.1	3092.7	2833.7	1975.7	1041.1	772.5	668.6	574.6	488.1	453.8	455.9
52.5°	3464.3	3288.5	2929.1	1885.4	1001.0	725.6	623.2	510.2	462.3	438.5	438.5
55°	3648.4	3482.2	3033.2	1754.1	900.8	670.7	547.2	486.0	441.7	420.0	417.9
57.5°	3833.1	3706.0	3131.8	1622.7	774.7	603.1	505.5	456.4	421.1	402.6	399.4
60°	4025.2	3961.8	3233.7	1501.8	650.2	516.6	474.9	432.8	396.8	376.3	374.6
62.5°	4223.1	4243.7	3313.3	1346.1	535.6	463.8	447.5	404.2	369.4	349.8	349.3
65°	4422.6	4515.4	3365.6	1130.3	434.3	413.7	417.9	373.1	337.7	320.8	320.3
67.5°	4572.9	4711.2	3350.8	855.4	356.2	366.2	381.0	340.4	307.1	294.0	294.5
70°	4589.8	4687.9	3205.2	585.7	298.2	319.8	339.8	308.2	273.9	264.3	264.9
72.5°	4365.1	4371.3	2799.4	382.5	252.3	280.7	296.5	275.4	242.2	232.7	232.2
75°	3775.6	3615.2	2055.3	252.3	211.0	241.2	255.9	241.2	209.0	211.0	203.7
77.5°	2860.6	2560.3	1247.9	179.4	176.2	202.6	222.7	212.2	184.7	207.4	182.6
80°	1473.8	1385.2	556.7	134.1	139.3	162.0	183.1	169.4	146.2	139.3	127.2
82.5°	337.7	392.6	219.6	96.0	100.8	116.6	139.8	127.2	105.0	88.7	87.6
85°	118.2	129.3	97.1	60.2	59.1	72.8	95.0	85.0	71.2	57.0	60.2
87.5°	37.5	49.1	36.4	24.3	25.3	32.7	43.8	40.1	33.2	21.6	22.7
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)