

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: P962096

Luminaire Tested: **NAV-SB2B-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10379.2 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

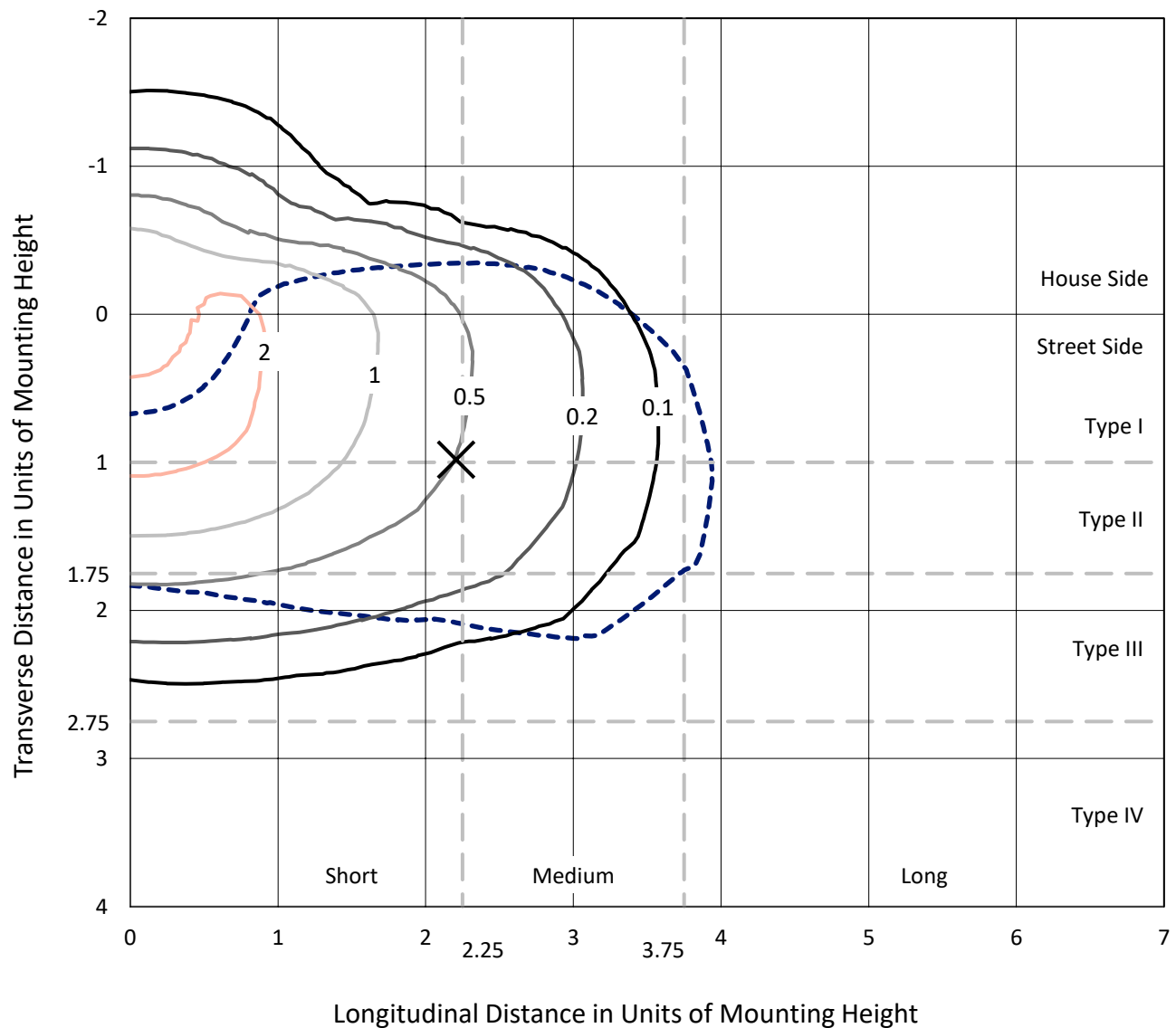
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

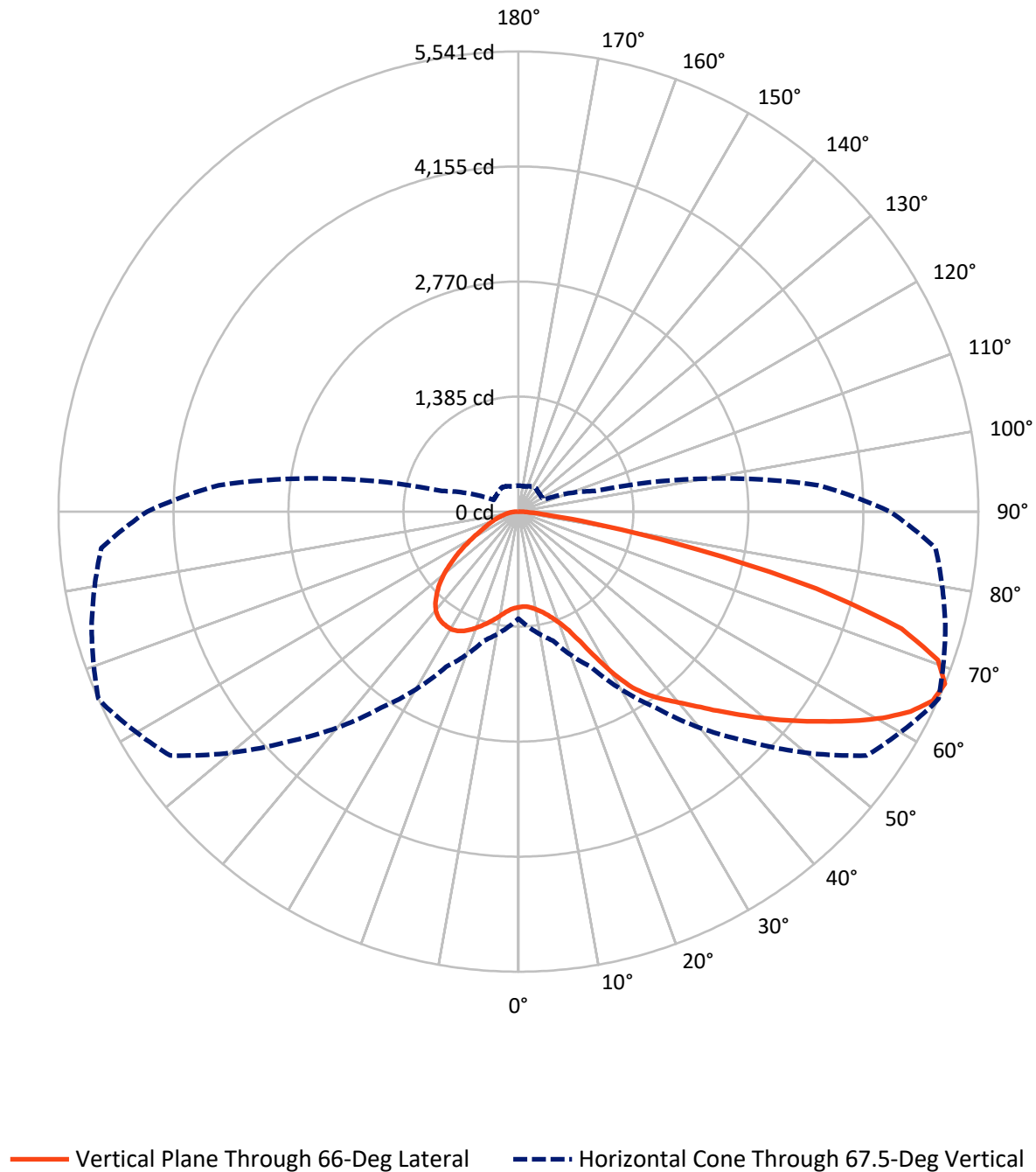
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2580.7	0.0	2580.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	7798.4	0.0	7798.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	10379.2	0.0	10379.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	1.1
10°-20°	377.1	3.6
20°-30°	726.8	7.0
30°-40°	1274.4	12.3
40°-50°	1894.6	18.3
50°-60°	2401.6	23.1
60°-70°	2349.9	22.6
70°-80°	1120.9	10.8
80°-90°	119.8	1.2
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°	10379.2	100.0
0°-180°	10379.2	100.0

Coefficient of Utilization



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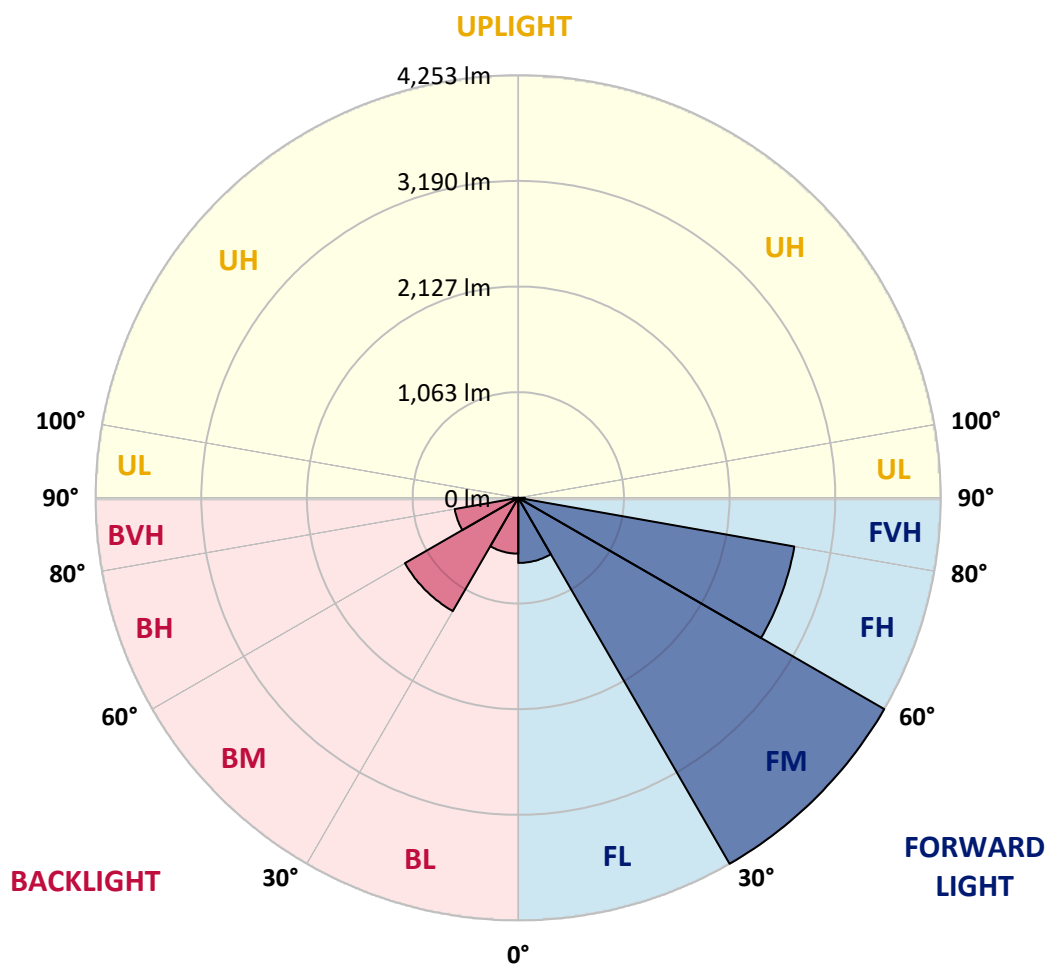
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	655.9	6.3			
FM	(30°-60°)	4253.3	41.0			
FH	(60°-80°)	2821.3	27.2			G2/5000
FVH	(80°-90°)	67.9	0.7			G1/100
BL	(0°-30°)	562.2	5.4	B2/1000		
BM	(30°-60°)	1317.2	12.7	B2/2500		
BH	(60°-80°)	649.5	6.3	B2/1000		G2/1000
BVH	(80°-90°)	51.9	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1139.2	1145.7	1144.1	1141.3	1140.8	1142.0	1143.6	1145.2	1144.6	1147.4	1151.7
5°	1135.9	1142.5	1142.0	1142.0	1144.1	1148.4	1151.2	1153.9	1151.2	1154.5	1160.5
7.5°	1138.1	1143.0	1145.2	1147.4	1152.8	1161.0	1167.6	1173.5	1170.2	1174.1	1181.7
10°	1165.9	1169.7	1171.9	1171.9	1175.7	1185.0	1191.6	1202.4	1199.8	1205.7	1215.5
12.5°	1216.7	1220.5	1220.5	1218.2	1221.0	1227.0	1229.2	1241.2	1236.3	1246.1	1255.9
15°	1278.8	1286.4	1280.4	1276.6	1277.7	1283.7	1283.2	1292.4	1287.5	1295.7	1304.4
17.5°	1347.5	1357.3	1347.5	1347.0	1344.8	1351.4	1351.9	1360.1	1351.4	1357.3	1363.4
20°	1428.7	1442.4	1434.2	1436.9	1432.0	1434.8	1437.5	1449.5	1435.8	1440.2	1438.6
22.5°	1543.2	1559.6	1550.9	1561.3	1558.0	1555.8	1555.2	1576.6	1555.2	1556.9	1541.1
25°	1710.1	1729.8	1714.5	1728.7	1728.7	1735.7	1743.9	1771.2	1735.7	1725.4	1684.5
27.5°	1956.6	1976.3	1946.3	1955.0	1952.3	1969.7	1961.0	2028.6	1990.4	1973.5	1891.2
30°	2253.3	2288.2	2231.5	2229.3	2226.6	2254.4	2266.9	2311.7	2272.9	2256.0	2156.8
32.5°	2574.0	2610.5	2542.8	2523.2	2512.9	2529.8	2519.4	2555.4	2528.7	2502.5	2379.8
35°	2913.2	2949.1	2884.8	2846.6	2805.1	2769.8	2732.6	2741.9	2716.9	2677.0	2550.0
37.5°	3233.8	3299.8	3231.6	3190.7	3114.4	3045.1	2941.4	2898.4	2874.9	2838.4	2710.3
40°	3560.4	3598.1	3546.3	3511.3	3428.4	3320.0	3154.1	3063.1	3031.4	2996.1	2887.5
42.5°	3800.9	3836.9	3809.1	3785.1	3720.2	3594.3	3379.9	3266.0	3220.1	3180.4	3088.2
45°	3991.8	4018.5	4001.1	4009.8	3982.0	3859.8	3613.8	3483.6	3436.1	3387.5	3315.1
47.5°	4068.6	4097.0	4124.8	4176.7	4224.1	4134.1	3865.3	3719.1	3669.0	3619.4	3547.9
50°	4059.9	4088.8	4169.6	4279.7	4427.0	4396.9	4130.3	3970.0	3923.6	3866.9	3800.9
52.5°	3990.1	4022.9	4126.4	4309.7	4544.2	4593.8	4400.2	4229.0	4185.4	4117.7	4051.8
55°	3807.0	3826.5	3982.0	4241.6	4572.0	4731.3	4664.8	4505.0	4461.3	4367.0	4295.0
57.5°	3467.2	3495.6	3721.9	4057.8	4502.2	4824.5	4897.0	4795.1	4753.0	4617.3	4542.0
60°	3023.9	3069.1	3328.2	3749.1	4324.5	4824.0	5108.1	5080.3	5045.4	4863.7	4785.2
62.5°	2522.1	2574.5	2823.7	3312.9	4013.6	4687.1	5240.0	5319.1	5301.1	5091.2	4990.8
65°	1937.0	1973.0	2221.1	2748.4	3529.9	4393.2	5255.3	5482.2	5485.5	5264.0	5098.2
67.5°	1289.7	1393.3	1608.7	2062.4	2882.1	3912.7	5121.2	5508.9	5540.5	5323.4	5044.2
70°	629.3	765.7	976.7	1340.4	2062.4	3176.0	4770.6	5289.7	5360.0	5150.1	4722.5
72.5°	261.2	305.3	420.5	661.4	1183.9	2143.2	4066.0	4695.2	4825.6	4563.3	3970.5
75°	176.1	190.9	240.5	339.2	539.4	1056.9	2932.2	3501.0	3710.9	3446.5	2817.1
77.5°	135.8	145.0	175.1	237.2	320.6	399.7	1569.5	2109.9	2218.4	2053.7	1465.9
80°	106.9	114.0	130.9	172.9	227.4	213.8	534.9	955.9	1018.6	854.5	471.2
82.5°	92.7	95.4	93.8	117.3	151.1	124.8	175.6	352.8	389.4	282.5	153.8
85°	67.0	74.7	78.0	72.6	80.2	63.2	72.0	124.8	137.5	122.7	86.7
87.5°	27.3	40.4	49.6	46.9	29.4	18.0	22.3	36.5	42.0	45.8	28.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1152.3	1156.1	1158.9	1162.0	1164.3	1167.6	1174.1	1177.9	1178.4	1181.2	1180.6
5°	1162.7	1168.1	1174.1	1182.8	1192.6	1200.8	1213.4	1222.1	1225.4	1228.1	1227.5
7.5°	1185.0	1192.6	1203.6	1218.8	1233.0	1243.9	1259.1	1269.6	1279.9	1283.7	1284.2
10°	1218.2	1229.2	1245.0	1265.7	1280.9	1295.2	1311.0	1319.7	1330.0	1334.4	1336.6
12.5°	1259.7	1271.2	1291.9	1320.8	1335.0	1344.8	1350.2	1348.1	1350.2	1354.0	1355.2
15°	1307.2	1319.7	1343.2	1374.2	1384.1	1375.3	1363.4	1352.4	1350.7	1351.9	1355.7
17.5°	1363.4	1372.6	1399.8	1426.0	1418.9	1382.9	1356.8	1339.4	1330.6	1327.9	1331.7
20°	1441.9	1441.9	1464.2	1480.6	1433.2	1372.1	1331.2	1302.8	1284.8	1277.1	1275.5
22.5°	1537.3	1528.6	1542.7	1531.2	1430.4	1341.5	1284.8	1235.7	1208.5	1197.5	1195.9
25°	1658.3	1648.0	1644.2	1573.3	1410.8	1292.9	1200.8	1141.3	1117.4	1111.4	1112.4
27.5°	1841.0	1814.9	1765.3	1596.1	1374.7	1216.7	1102.7	1047.6	1033.9	1034.5	1036.1
30°	2084.2	2031.9	1910.3	1600.0	1315.9	1108.6	1002.3	963.1	956.5	959.2	968.5
32.5°	2309.4	2259.8	2058.6	1582.5	1225.4	1002.9	912.4	886.1	876.4	879.7	884.0
35°	2486.1	2472.5	2196.1	1558.0	1114.1	903.6	831.6	809.2	790.2	785.8	789.0
37.5°	2653.0	2647.6	2299.1	1523.7	1004.0	833.2	766.7	737.3	709.5	694.2	694.7
40°	2836.3	2830.7	2366.7	1470.8	906.3	772.1	708.4	669.6	635.3	607.5	610.2
42.5°	3042.4	3010.2	2398.9	1394.9	823.5	720.4	660.9	608.5	563.3	537.7	539.4
45°	3267.6	3195.0	2398.4	1298.5	753.7	672.9	610.2	536.1	494.0	470.1	468.9
47.5°	3506.4	3371.7	2368.9	1191.6	686.0	620.5	531.7	475.0	447.2	432.4	429.2
50°	3752.9	3537.0	2318.8	1068.9	616.7	561.2	482.6	443.9	422.6	409.0	404.1
52.5°	3984.7	3686.9	2258.2	929.8	546.4	503.4	460.8	430.8	408.5	393.2	386.6
55°	4200.1	3816.2	2172.6	787.4	489.1	464.6	450.5	425.4	399.7	381.7	374.6
57.5°	4391.5	3900.2	2024.8	653.8	448.2	437.9	439.5	416.0	386.6	371.4	361.5
60°	4550.8	3961.8	1806.2	530.0	415.0	411.7	422.6	398.6	364.3	346.9	339.2
62.5°	4646.2	3960.7	1537.8	434.1	386.6	387.8	400.3	376.8	341.9	325.5	320.6
65°	4638.0	3863.6	1243.3	371.4	359.4	360.5	376.8	352.8	323.4	313.5	313.0
67.5°	4473.8	3627.0	953.8	330.5	329.3	334.3	353.4	336.5	311.9	310.9	312.5
70°	4029.4	3135.7	687.2	297.8	298.3	305.3	330.5	326.2	306.0	308.1	307.6
72.5°	3231.1	2390.7	461.4	263.4	263.9	275.4	308.6	318.0	299.9	328.8	333.2
75°	2151.9	1491.0	296.6	226.8	227.4	242.1	289.6	302.1	283.6	327.7	330.5
77.5°	1033.9	670.2	214.8	190.9	190.9	204.5	250.3	270.5	241.6	254.7	233.4
80°	357.2	251.9	169.0	153.8	150.5	159.8	211.0	234.5	208.3	192.0	180.0
82.5°	140.7	130.9	135.8	119.4	108.5	114.5	164.1	193.6	153.2	138.5	138.0
85°	80.7	85.1	95.9	79.0	62.7	70.3	120.5	139.1	115.6	102.0	104.1
87.5°	21.8	30.0	44.2	40.9	28.4	30.0	57.3	76.9	66.5	51.2	52.9
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)