

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: P883147

Luminaire Tested: **NAV-SB3B-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14121 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

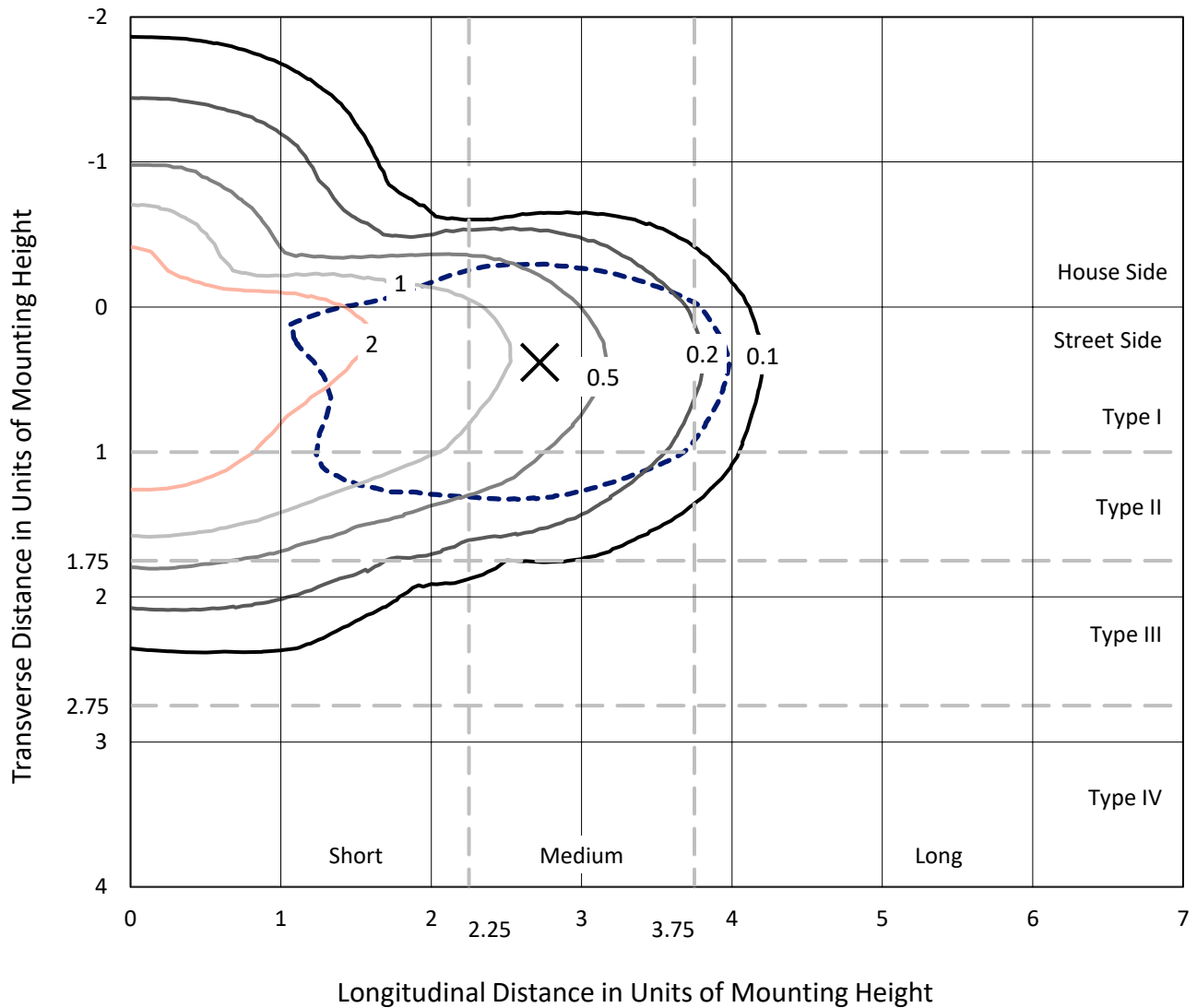
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

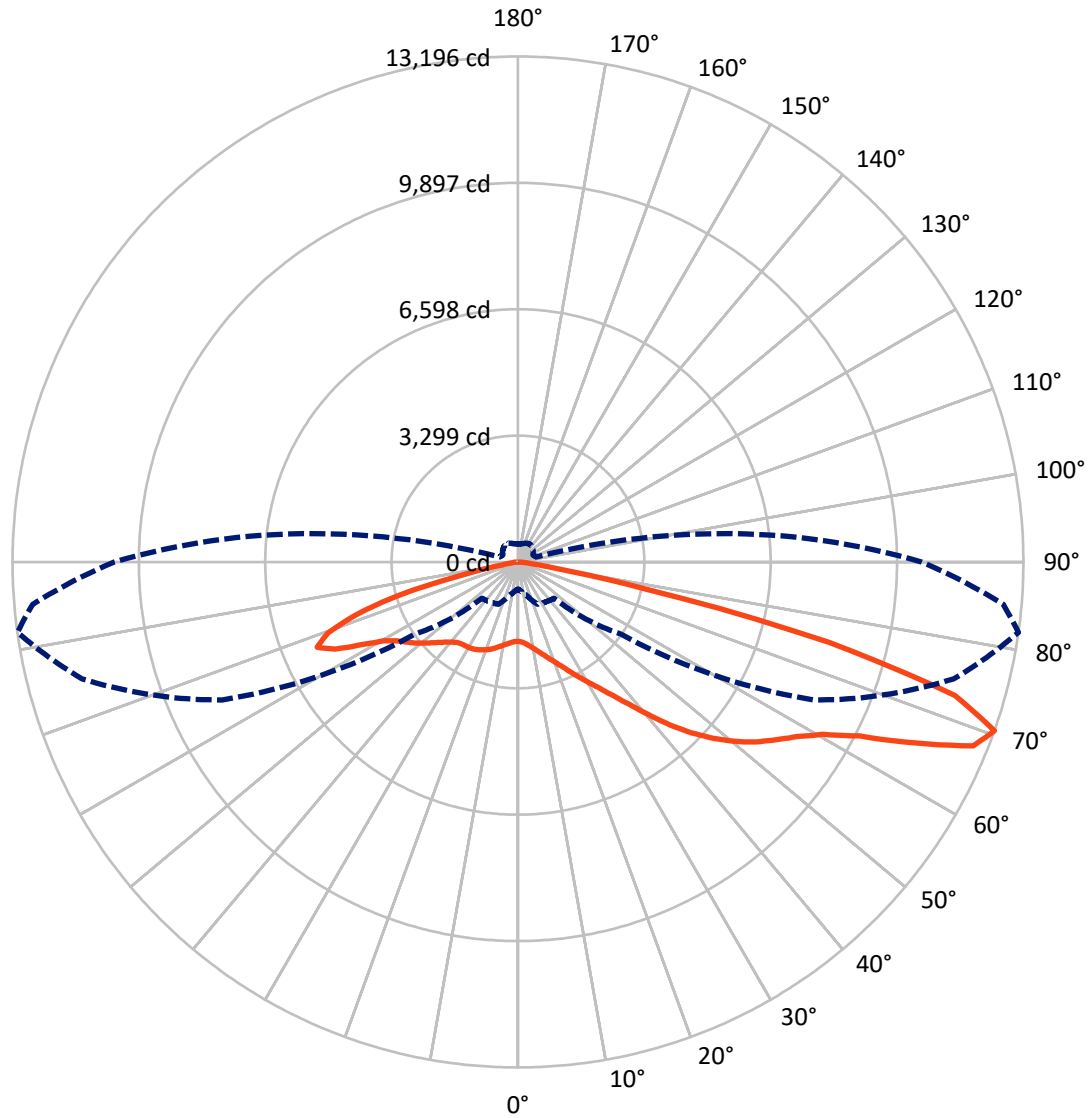
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3481.2	0.0	3481.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	10639.8	0.0	10639.8
	% Fixture	75.3	0.0	75.3
Total	Lumens	14121.0	0.0	14121.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	1.4
10°-20°	561.6	4.0
20°-30°	939.5	6.7
30°-40°	1467.8	10.4
40°-50°	2337.6	16.6
50°-60°	3253.0	23.0
60°-70°	3402.8	24.1
70°-80°	1778.5	12.6
80°-90°	184.7	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°	14121.0	100.0
0°-180°	14121.0	100.0

Coefficient of Utilization



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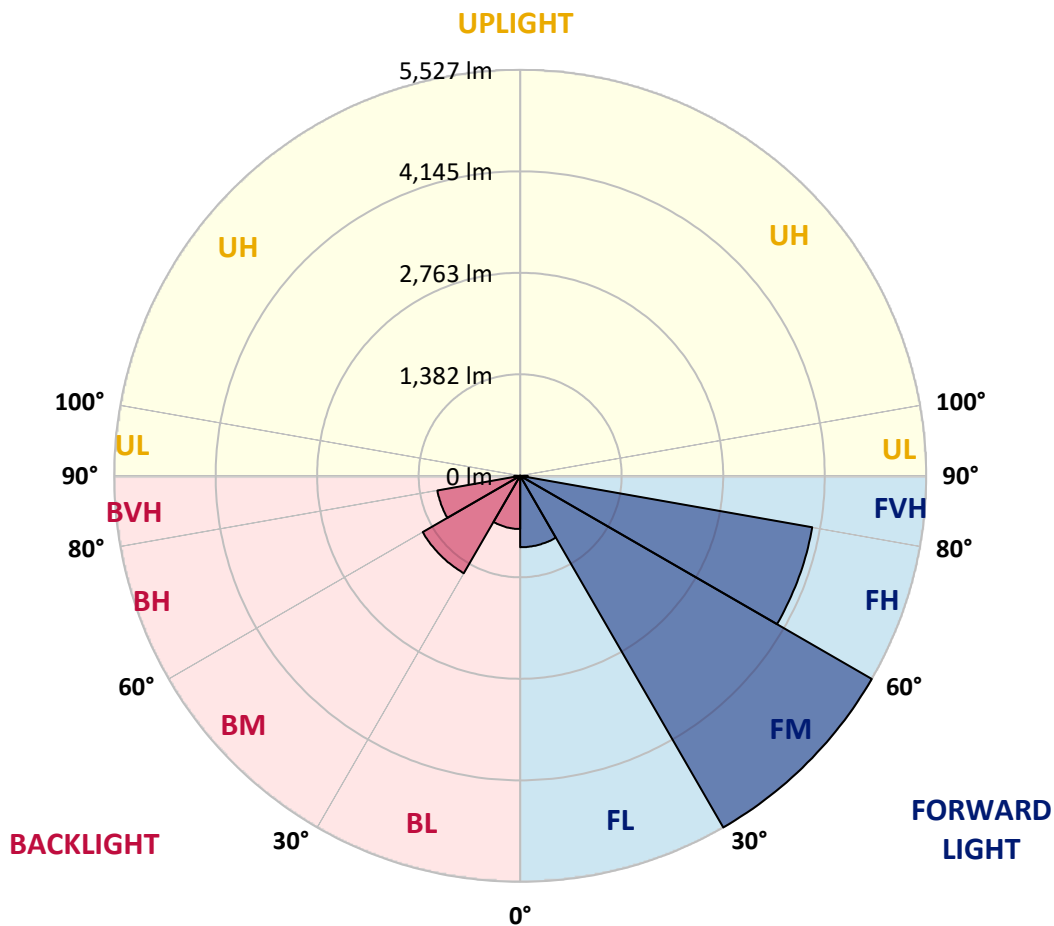
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	972.4	6.9			
FM (30°-60°)	5526.8	39.1			
FH (60°-80°)	4037.2	28.6			G2/5000
FVH (80°-90°)	103.4	0.7			G2/225
BL (0°-30°)	724.2	5.1	B2/1000		
BM (30°-60°)	1531.6	10.8	B2/2500		
BH (60°-80°)	1144.1	8.1	B3/2500		G3/2500
BVH (80°-90°)	81.3	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3
2.5°	2119.8	2131.8	2128.0	2124.3	2124.3	2119.0	2118.3	2110.8	2104.8	2095.0	2092.8
5°	2146.7	2159.5	2158.0	2161.0	2170.7	2173.0	2175.2	2170.7	2158.7	2146.7	2141.5
7.5°	2122.8	2137.0	2141.5	2159.5	2189.5	2216.4	2236.7	2244.9	2233.7	2216.4	2208.2
10°	2041.8	2057.6	2073.3	2116.0	2169.2	2232.9	2286.9	2319.1	2316.8	2300.4	2286.1
12.5°	1877.7	1894.2	1927.9	2011.1	2108.5	2220.9	2321.3	2388.8	2412.0	2400.0	2375.3
15°	1746.6	1760.9	1786.3	1871.8	1998.4	2169.2	2334.1	2465.2	2524.4	2517.6	2487.7
17.5°	1742.9	1748.9	1764.6	1805.1	1902.5	2088.3	2320.6	2540.1	2653.3	2652.5	2615.1
20°	1808.8	1811.1	1820.0	1828.3	1883.7	2026.9	2286.1	2602.3	2797.9	2797.9	2757.4
22.5°	1900.2	1898.7	1907.7	1900.2	1927.2	2021.6	2264.4	2657.0	2959.0	2971.0	2920.0
25°	2037.3	2029.9	2027.6	2010.4	2015.6	2070.3	2288.4	2719.2	3150.1	3174.8	3111.1
27.5°	2220.2	2208.2	2199.9	2160.2	2146.7	2170.7	2361.8	2794.1	3362.9	3405.6	3324.6
30°	2458.5	2436.7	2424.7	2355.8	2307.1	2310.8	2472.7	2893.8	3585.4	3654.3	3551.7
32.5°	2783.6	2749.9	2717.7	2604.6	2515.4	2486.2	2615.8	3031.7	3826.7	3936.8	3804.9
35°	3147.8	3120.8	3086.4	2911.8	2774.7	2707.2	2809.1	3224.2	4109.2	4283.7	4112.2
37.5°	3498.5	3475.3	3491.7	3256.5	3079.6	2981.5	3062.4	3482.7	4457.6	4715.3	4497.3
40°	3861.1	3843.2	3845.4	3620.6	3414.6	3304.4	3369.6	3807.2	4857.0	5228.6	4960.4
42.5°	4255.3	4241.8	4196.8	3997.5	3766.0	3663.3	3723.3	4181.8	5285.6	5813.1	5468.4
45°	4696.6	4688.4	4646.4	4417.9	4152.6	4037.2	4118.2	4595.5	5716.4	6363.1	5978.7
47.5°	5078.0	5084.7	5079.5	4886.9	4611.9	4442.6	4539.3	5027.1	6117.3	6880.1	6468.0
50°	5261.6	5296.8	5348.5	5288.6	5117.7	4945.4	4964.1	5443.7	6499.4	7364.9	6937.0
52.5°	5165.7	5232.4	5373.2	5469.1	5535.1	5499.1	5448.9	5857.3	6859.1	7802.5	7380.6
55°	4808.3	4901.9	5135.7	5367.2	5703.7	5965.2	6031.1	6315.8	7209.8	8187.6	7800.2
57.5°	4157.1	4309.2	4519.0	4987.3	5553.8	6190.7	6710.0	6952.0	7581.4	8599.0	8239.3
60°	3040.7	3244.5	3505.2	4202.1	5029.3	6070.1	7287.7	7929.1	8109.7	9131.7	8811.0
62.5°	1945.9	2071.8	2311.6	2968.0	3918.8	5451.9	7464.5	9150.4	9005.1	10005.4	9668.2
65°	1332.3	1413.2	1632.7	2001.4	2533.4	4058.2	6991.0	10066.1	10427.3	11390.1	11133.8
67.5°	968.1	1029.5	1216.9	1539.8	1650.7	2401.5	5424.9	10024.1	11809.7	12816.8	12418.1
70°	705.8	749.3	906.7	1216.9	1270.1	1336.0	3286.4	8521.0	11779.7	13195.9	12718.6
72.5°	523.0	553.0	658.6	944.1	1028.0	902.2	1626.7	6193.0	10122.3	11935.6	11552.7
75°	378.4	400.9	478.8	722.3	822.7	687.1	811.5	3619.1	7060.7	8395.9	8463.3
77.5°	289.2	306.5	357.4	529.0	658.6	515.5	503.5	1664.9	3347.9	3364.4	3553.2
80°	232.3	243.5	271.2	372.4	505.0	385.9	328.2	672.1	1058.0	895.4	939.6
82.5°	170.8	189.6	229.3	261.5	361.2	266.0	200.1	339.4	402.4	346.2	349.2
85°	97.4	110.1	138.6	187.3	230.8	162.6	114.6	150.6	187.3	153.6	137.1
87.5°	34.5	45.0	48.7	73.4	100.4	67.4	44.2	43.5	61.4	45.7	38.2
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°	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3	2070.3
2.5°	2085.3	2081.6	2066.6	2046.3	2025.4	2005.1	1998.4	1984.1	1974.4	1969.2	1975.2
5°	2127.3	2115.3	2080.1	2035.1	1987.9	1936.9	1901.0	1868.0	1844.0	1821.5	1830.5
7.5°	2187.2	2166.2	2105.5	2026.9	1942.9	1858.3	1795.3	1747.4	1715.1	1694.2	1698.7
10°	2256.9	2224.7	2131.8	2014.1	1884.5	1763.1	1688.9	1647.7	1627.5	1616.2	1619.2
12.5°	2337.1	2291.4	2158.7	1984.9	1795.3	1656.7	1605.7	1593.8	1594.5	1595.3	1596.8
15°	2436.0	2372.3	2180.5	1921.2	1679.2	1575.0	1566.0	1585.5	1605.7	1615.5	1614.7
17.5°	2547.6	2457.7	2184.2	1816.3	1565.3	1522.6	1551.1	1593.0	1623.7	1637.2	1640.2
20°	2667.5	2544.6	2157.2	1667.9	1471.6	1479.9	1530.8	1584.8	1618.5	1635.7	1640.2
22.5°	2804.6	2637.5	2092.8	1512.1	1395.2	1433.4	1493.4	1545.8	1581.0	1598.3	1602.8
25°	2961.2	2741.7	1991.6	1381.0	1329.3	1381.0	1440.9	1484.4	1512.8	1528.6	1533.1
27.5°	3135.1	2850.3	1856.8	1276.8	1271.6	1327.0	1376.5	1410.2	1425.2	1437.2	1441.7
30°	3309.7	2949.2	1693.4	1198.1	1221.4	1273.8	1309.0	1324.0	1328.5	1330.8	1336.0
32.5°	3498.5	3034.7	1521.8	1132.9	1173.4	1222.1	1243.1	1249.8	1228.9	1214.6	1219.1
35°	3727.0	3126.1	1354.0	1081.2	1126.2	1168.2	1174.9	1168.9	1144.2	1115.0	1116.5
37.5°	4009.5	3240.0	1219.9	1044.5	1082.0	1109.7	1101.5	1100.0	1102.2	1067.8	1070.0
40°	4355.7	3388.3	1121.7	1016.1	1046.0	1052.0	1028.8	1041.5	1052.8	1000.3	1001.8
42.5°	4740.1	3567.4	1059.5	996.6	1016.1	1001.8	965.8	980.1	978.6	909.6	908.9
45°	5132.0	3762.2	1037.8	982.3	988.3	959.9	920.1	923.9	892.4	830.2	832.5
47.5°	5521.6	3971.3	1051.3	970.3	953.9	921.6	890.9	874.4	828.0	781.5	781.5
50°	5903.7	4190.8	1100.7	946.4	906.7	887.9	865.4	836.2	786.8	747.1	744.1
52.5°	6258.2	4411.9	1156.2	906.7	847.5	858.7	844.5	810.7	762.0	721.6	722.3
55°	6593.8	4632.9	1177.9	852.0	792.0	833.2	825.0	762.8	704.3	671.4	668.4
57.5°	6959.5	4898.9	1153.9	782.3	747.1	804.0	772.5	703.6	669.9	645.1	642.9
60°	7466.0	5316.3	1102.2	696.1	704.3	760.5	706.6	678.1	641.4	613.7	612.2
62.5°	8307.5	6094.8	1019.0	610.7	654.1	696.1	675.1	646.6	609.2	582.2	582.2
65°	9551.3	7176.8	862.4	544.0	597.9	633.2	641.4	612.9	574.0	545.5	547.0
67.5°	10600.3	7855.7	652.6	488.5	540.2	582.2	605.4	577.7	536.5	508.8	509.5
70°	10542.6	7362.6	498.3	433.8	489.3	532.0	562.0	540.2	496.0	469.8	472.1
72.5°	9364.0	6159.2	403.1	378.4	437.6	479.6	515.5	499.0	454.1	428.6	428.6
75°	6879.3	4372.2	322.2	322.2	373.2	424.9	464.6	454.1	412.9	394.9	389.6
77.5°	2899.8	1834.3	252.5	267.5	310.2	364.9	414.4	418.1	382.1	404.6	367.2
80°	771.0	505.8	192.6	210.6	243.5	301.2	360.4	358.9	320.0	299.0	278.0
82.5°	293.7	199.3	137.1	148.4	176.1	230.8	285.5	294.5	255.5	221.0	221.0
85°	113.1	85.4	84.7	89.2	102.7	152.9	215.8	223.3	192.6	163.3	168.6
87.5°	29.2	25.5	31.5	30.0	47.2	81.7	123.6	128.1	117.6	68.2	97.4
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)