

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: P970521

Luminaire Tested: **NAV-SB6B-830-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-830-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32033.3 lumens
Efficiency: N/A
Efficacy: 145.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 220.4
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



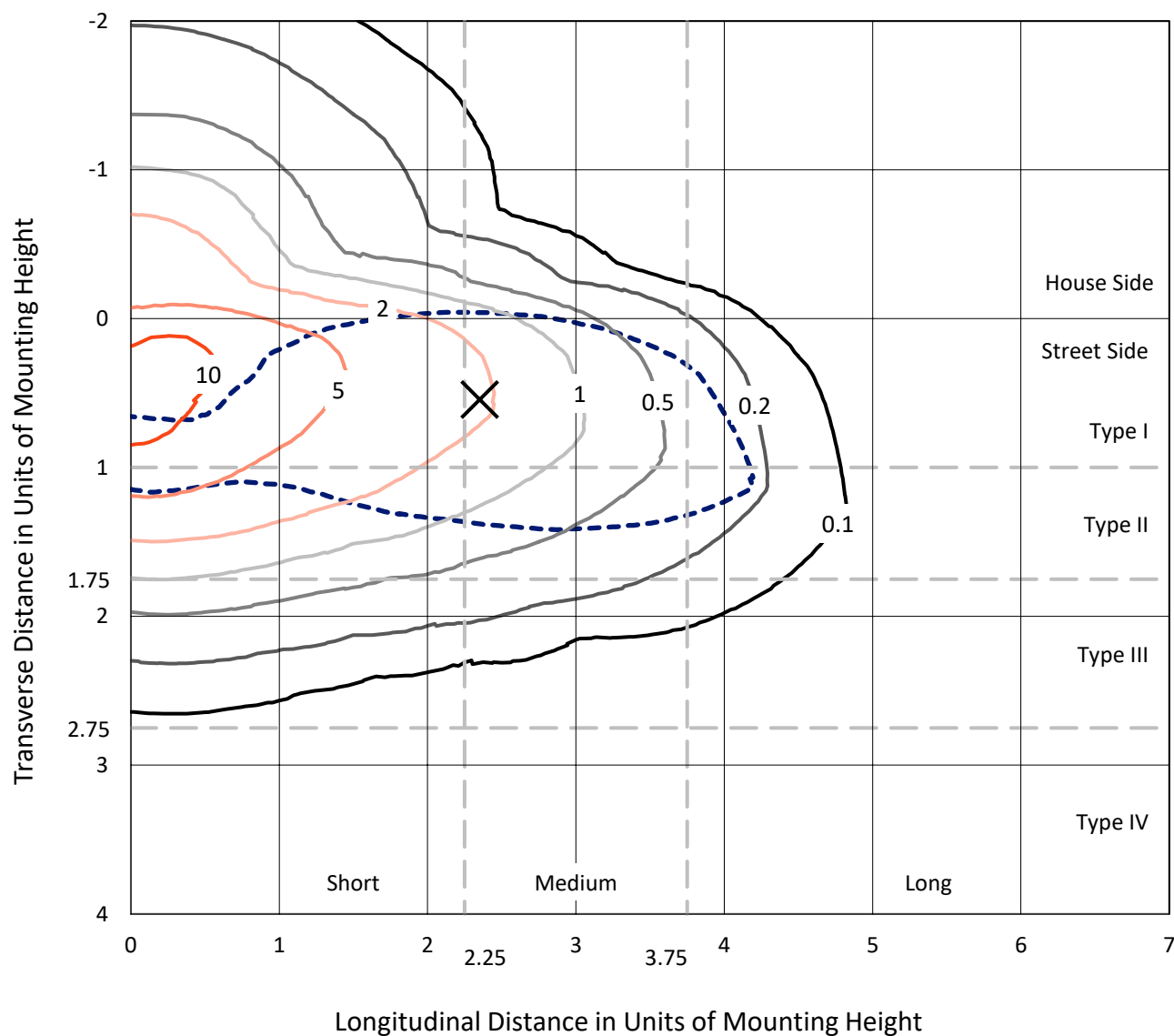
REPORT NUMBER: P970521

CATALOG NUMBER: NAV-SB6B-830-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

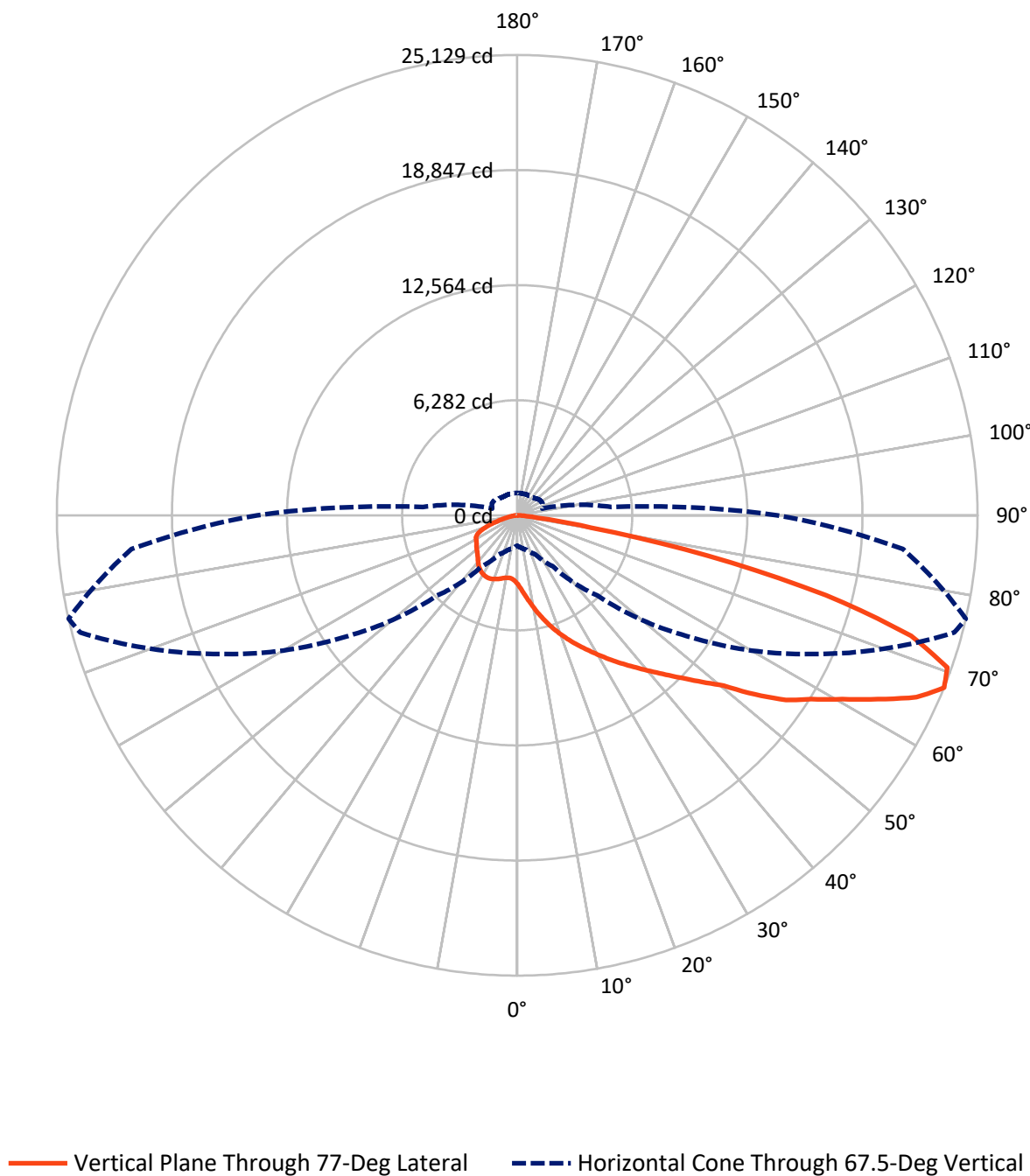
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 fc
Type II - Medium - N/A

REPORT NUMBER: P970521
CATALOG NUMBER: NAV-SB6B-830-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P970521

CATALOG NUMBER: NAV-SB6B-830-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6059.4	0.0	6059.4
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	25973.9	0.0	25973.9
	% Fixture	81.1	0.0	81.1
Total	Lumens	32033.3	0.0	32033.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	402.9	1.3
10°-20°	1447.3	4.5
20°-30°	2732.7	8.5
30°-40°	4402.3	13.7
40°-50°	6021.5	18.8
50°-60°	6792.3	21.2
60°-70°	6339.8	19.8
70°-80°	3475.3	10.8
80°-90°	419.2	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°	32033.3	100.0
0°-180°	32033.3	100.0

Coefficient of Utilization



REPORT NUMBER: P970521

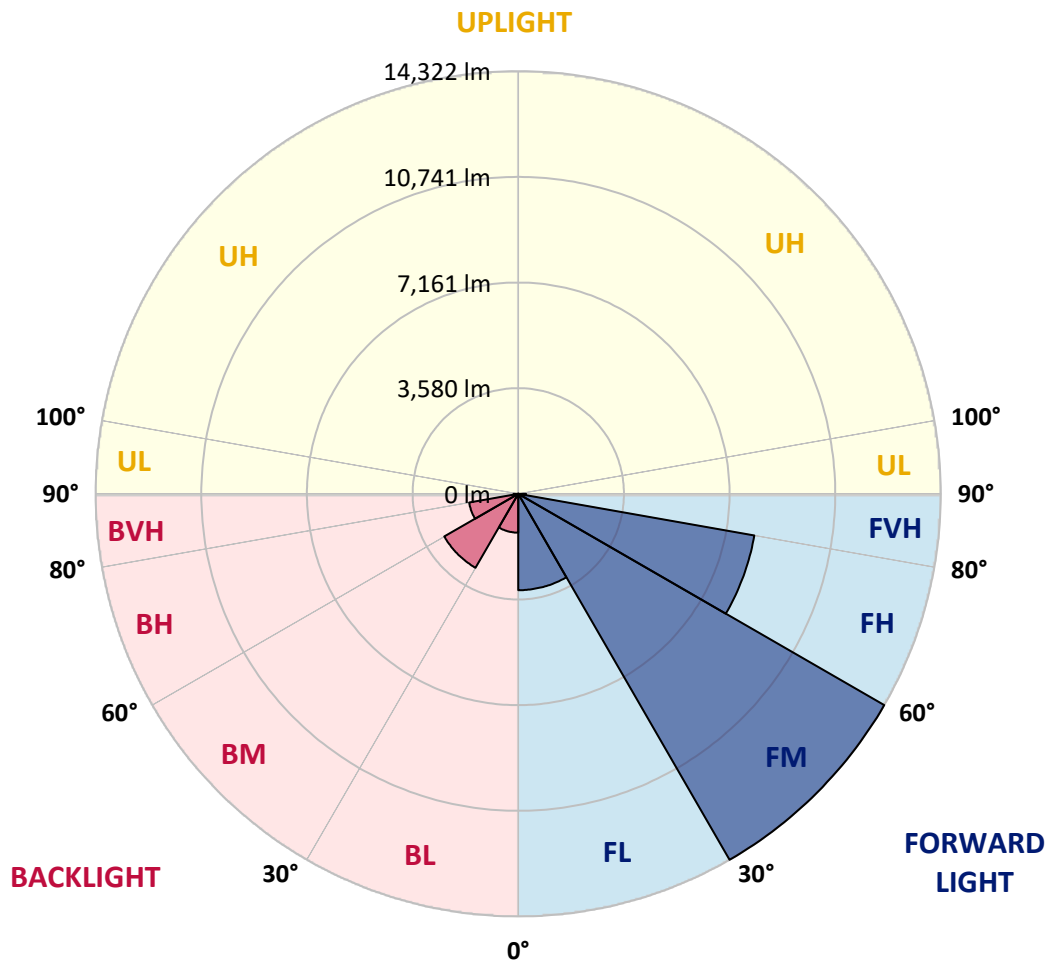
CATALOG NUMBER: NAV-SB6B-830-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3265.4	10.2			
FM	(30°-60°)	14321.7	44.7			
FH	(60°-80°)	8124.6	25.4			G4/12000
FVH	(80°-90°)	262.2	0.8			G3/500
BL	(0°-30°)	1317.5	4.1	B3/2500		
BM	(30°-60°)	2894.4	9.0	B3/5000		
BH	(60°-80°)	1690.5	5.3	B3/2500		G3/2500
BVH	(80°-90°)	157.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



REPORT NUMBER: P970521

CATALOG NUMBER: NAV-SB6B-830-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5
2.5°	4706.0	4739.1	4697.7	4697.7	4558.8	4486.0	4347.1	4241.3	4051.2	4018.1	3892.4
5°	5562.5	5603.9	5546.0	5521.2	5357.5	5207.0	4973.8	4744.0	4405.0	4370.3	4074.4
7.5°	6225.5	6278.5	6227.3	6200.7	6055.3	5886.6	5613.8	5293.0	4815.1	4747.3	4319.0
10°	6766.3	6774.5	6758.0	6768.0	6653.9	6515.0	6235.5	5861.8	5264.9	5172.3	4615.1
12.5°	7072.2	7110.2	7143.3	7202.9	7183.0	7097.0	6845.7	6399.2	5741.1	5622.0	4937.5
15°	7216.1	7282.2	7356.6	7493.9	7604.7	7626.1	7434.3	6976.3	6225.5	6081.7	5263.3
17.5°	7267.4	7330.2	7447.5	7646.0	7884.1	8044.5	7958.5	7536.8	6705.1	6539.8	5605.5
20°	7526.9	7545.1	7616.3	7804.8	8062.6	8328.8	8393.4	8075.9	7179.7	6992.9	5959.3
22.5°	8082.5	8046.1	8065.9	8151.9	8337.1	8595.1	8742.3	8552.1	7667.5	7452.5	6316.6
25°	9000.2	8894.4	8788.6	8689.3	8783.6	8929.1	9096.2	9028.3	8178.4	7905.6	6677.0
27.5°	10159.4	10030.3	9797.3	9471.5	9357.4	9408.7	9483.1	9469.9	8651.3	8375.2	7049.0
30°	11300.3	11149.8	10872.1	10400.8	10099.8	9964.2	9908.1	9870.0	9165.6	8871.3	7424.4
32.5°	12211.4	12092.3	11819.5	11292.0	10855.5	10624.0	10437.2	10301.6	9703.0	9408.7	7821.3
35°	13008.4	12897.7	12585.2	12009.7	11535.1	11288.7	11044.0	10754.6	10261.9	9964.2	8247.9
37.5°	13736.0	13625.2	13196.9	12598.4	12120.4	11950.2	11731.8	11240.8	10822.5	10541.3	8699.3
40°	14195.6	14170.8	13770.7	13092.7	12596.6	12512.4	12439.6	11804.6	11444.1	11183.0	9195.4
42.5°	14313.1	14367.6	14050.2	13492.9	13020.0	12952.2	13122.5	12442.9	12141.9	11892.3	9757.6
45°	14030.3	14187.4	13979.1	13600.4	13320.9	13284.5	13727.7	13140.7	12914.2	12686.0	10435.5
47.5°	13314.3	13580.5	13494.5	13441.6	13402.0	13559.0	14260.1	13881.5	13788.9	13590.5	11209.4
50°	11869.1	12373.5	12524.0	12857.9	13241.6	13772.3	14744.6	14690.1	14810.7	14610.7	12151.9
52.5°	9370.7	10065.1	10938.2	11774.9	12748.8	13701.3	15277.1	15850.8	16360.1	16251.0	13650.0
55°	7735.3	8047.8	8719.2	10253.6	11793.0	13402.0	15516.9	16788.4	17897.9	17800.4	14785.9
57.5°	6478.6	6758.0	7171.4	8452.9	10347.9	12722.4	15665.7	17360.5	18951.2	18941.3	15907.1
60°	5130.9	5427.0	5850.2	6758.0	8659.6	11548.4	15632.6	18012.0	20295.6	20378.2	17274.5
62.5°	3609.6	3935.4	4405.0	5251.7	6934.9	10027.1	14957.9	18483.3	21878.0	22102.9	18919.9
65°	2372.9	2587.8	2941.6	3672.5	5167.3	8071.0	13669.8	18544.5	23571.2	23951.6	20464.2
67.5°	1663.5	1746.2	1954.5	2351.4	3406.3	6189.3	11617.8	17911.2	24700.7	25128.9	21134.0
70°	1298.1	1339.4	1445.1	1603.9	2139.7	4162.0	8902.6	16264.3	24459.2	24905.7	20434.5
72.5°	1121.1	1160.8	1200.5	1220.4	1435.3	2569.6	6030.5	13598.8	22185.6	22488.2	17767.4
75°	1016.9	1026.8	1060.0	1053.3	1094.6	1666.8	3480.7	9908.1	17504.4	17400.2	13115.9
77.5°	854.8	868.1	922.7	914.4	972.3	1139.3	1807.3	6394.3	11348.3	10640.5	7300.4
80°	724.3	730.8	790.4	780.4	845.0	825.1	922.7	3259.1	4813.5	4077.7	2104.9
82.5°	251.3	310.9	603.5	621.8	644.9	499.4	532.5	1329.4	1470.0	1126.1	441.5
85°	122.4	130.6	307.6	436.5	434.9	251.3	259.6	474.6	463.0	363.8	147.2
87.5°	19.9	24.8	36.4	170.4	135.6	66.1	89.3	92.6	95.9	82.7	33.1
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: P970521

CATALOG NUMBER: NAV-SB6B-830-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5	3758.5
2.5°	3799.9	3717.2	3543.5	3383.1	3257.4	3136.8	3069.0	3011.1	2978.0	2971.4	2971.4
5°	3902.4	3732.0	3416.2	3150.0	2976.4	2847.4	2779.6	2736.6	2715.1	2701.9	2700.3
7.5°	4049.6	3799.9	3350.1	3047.4	2865.6	2773.0	2738.3	2731.6	2730.0	2731.6	2736.6
10°	4252.9	3910.6	3343.4	3022.7	2870.5	2819.3	2817.6	2819.3	2825.9	2827.6	2829.2
12.5°	4472.8	4024.8	3369.9	3044.1	2933.3	2905.3	2900.3	2898.7	2903.6	2906.9	2908.5
15°	4712.6	4175.2	3414.6	3090.5	3002.8	2973.1	2968.1	2958.1	2956.5	2954.9	2953.2
17.5°	4959.0	4324.0	3464.2	3140.1	3047.4	3006.1	2988.0	2964.8	2946.6	2941.6	2946.6
20°	5208.6	4471.2	3498.9	3164.9	3050.8	2992.9	2956.5	2916.8	2885.5	2867.2	2873.9
22.5°	5474.8	4625.0	3520.4	3158.2	3021.0	2941.6	2875.5	2829.2	2781.2	2749.9	2751.5
25°	5734.5	4758.9	3518.7	3123.6	2963.2	2862.3	2778.0	2718.4	2652.3	2619.2	2619.2
27.5°	5984.2	4879.6	3477.4	3062.4	2880.5	2768.0	2667.2	2596.0	2531.5	2500.2	2498.5
30°	6242.1	4980.5	3412.9	2973.1	2782.9	2658.8	2548.1	2487.0	2429.0	2399.3	2397.7
32.5°	6498.4	5073.0	3321.9	2862.3	2670.4	2551.4	2442.3	2386.1	2351.4	2351.4	2353.0
35°	6769.6	5137.5	3201.3	2733.3	2551.4	2437.3	2351.4	2318.2	2315.0	2295.1	2290.2
37.5°	7055.7	5178.9	3054.1	2601.0	2434.0	2326.5	2300.1	2260.4	2227.3	2184.4	2177.7
40°	7356.6	5220.2	2877.2	2463.8	2310.0	2250.5	2238.9	2186.0	2091.7	1985.9	1971.0
42.5°	7722.0	5248.3	2693.6	2326.5	2179.4	2159.6	2176.1	2085.2	1934.7	1855.2	1856.9
45°	8145.4	5294.6	2525.0	2190.9	2045.4	2045.4	2114.9	1995.8	1871.9	1822.2	1830.4
47.5°	8694.4	5402.2	2367.9	2042.1	1921.5	1954.5	1979.3	1888.4	1818.9	1757.7	1756.0
50°	9488.0	5660.0	2205.8	1891.6	1827.2	1893.3	1858.6	1805.6	1724.7	1675.1	1670.0
52.5°	10473.6	5812.2	2062.0	1756.0	1746.2	1812.3	1762.7	1713.1	1651.9	1585.8	1572.6
55°	11144.8	5840.3	1941.2	1656.8	1691.6	1685.0	1666.8	1622.2	1589.1	1501.4	1503.1
57.5°	11895.5	5896.5	1842.0	1597.4	1656.8	1584.1	1577.5	1539.4	1496.5	1436.9	1417.1
60°	12793.4	5984.2	1756.0	1574.2	1627.1	1517.9	1484.9	1470.0	1427.0	1397.3	1405.5
62.5°	13772.3	6063.5	1668.4	1577.5	1592.3	1453.4	1403.8	1398.9	1372.5	1362.5	1362.5
65°	14440.4	5846.9	1559.3	1574.2	1537.8	1387.3	1324.5	1322.9	1301.3	1298.1	1296.4
67.5°	14207.2	5160.7	1412.1	1527.9	1481.5	1321.2	1251.7	1245.1	1217.0	1218.6	1218.6
70°	13039.8	4181.8	1208.8	1413.8	1412.1	1261.7	1175.7	1154.1	1116.1	1122.8	1129.3
72.5°	10850.5	3098.8	935.9	1223.6	1301.3	1207.0	1088.0	1053.3	1005.3	1012.0	1010.3
75°	7836.1	2106.6	681.2	930.9	1132.7	1142.6	1002.0	942.5	884.7	894.5	897.9
77.5°	4009.8	1193.8	501.0	641.5	889.6	1038.4	924.3	845.0	831.7	924.3	911.1
80°	1308.0	598.6	347.3	449.8	583.7	849.9	810.3	719.2	716.0	737.5	633.3
82.5°	390.2	253.0	223.2	296.0	322.5	651.5	699.5	544.0	467.9	492.7	509.3
85°	134.0	122.4	127.3	147.2	153.8	382.0	489.4	360.5	340.6	375.4	370.4
87.5°	31.5	42.9	36.4	33.1	33.1	92.6	190.1	150.5	208.4	138.9	134.0
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)