

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: McGRAW-EDISON

Report Number: P833695

Luminaire Tested: **TTN-D2-830-U-WQ-SG-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833695
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-WQ-SG-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4704.9 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U3 - G1

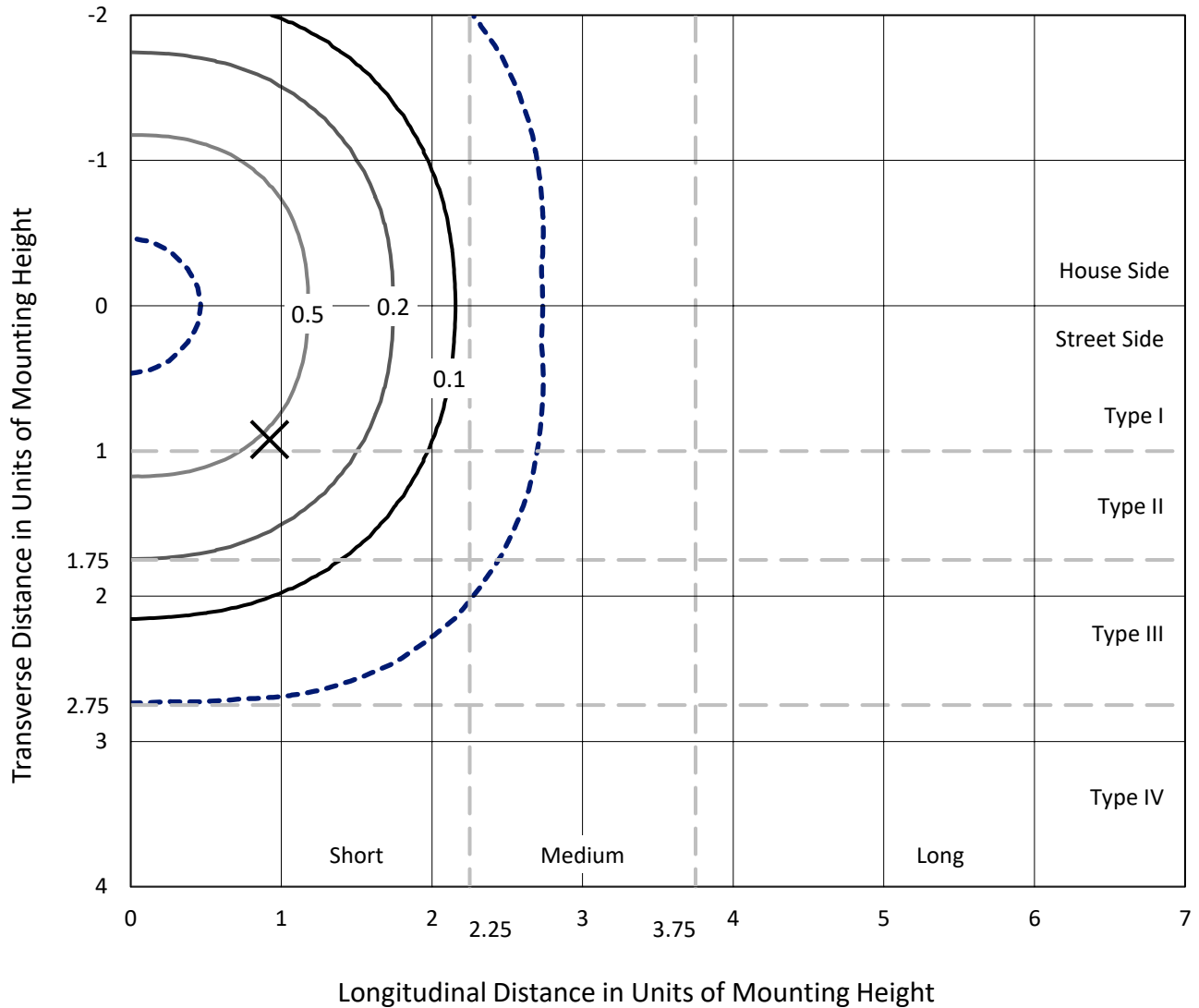
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

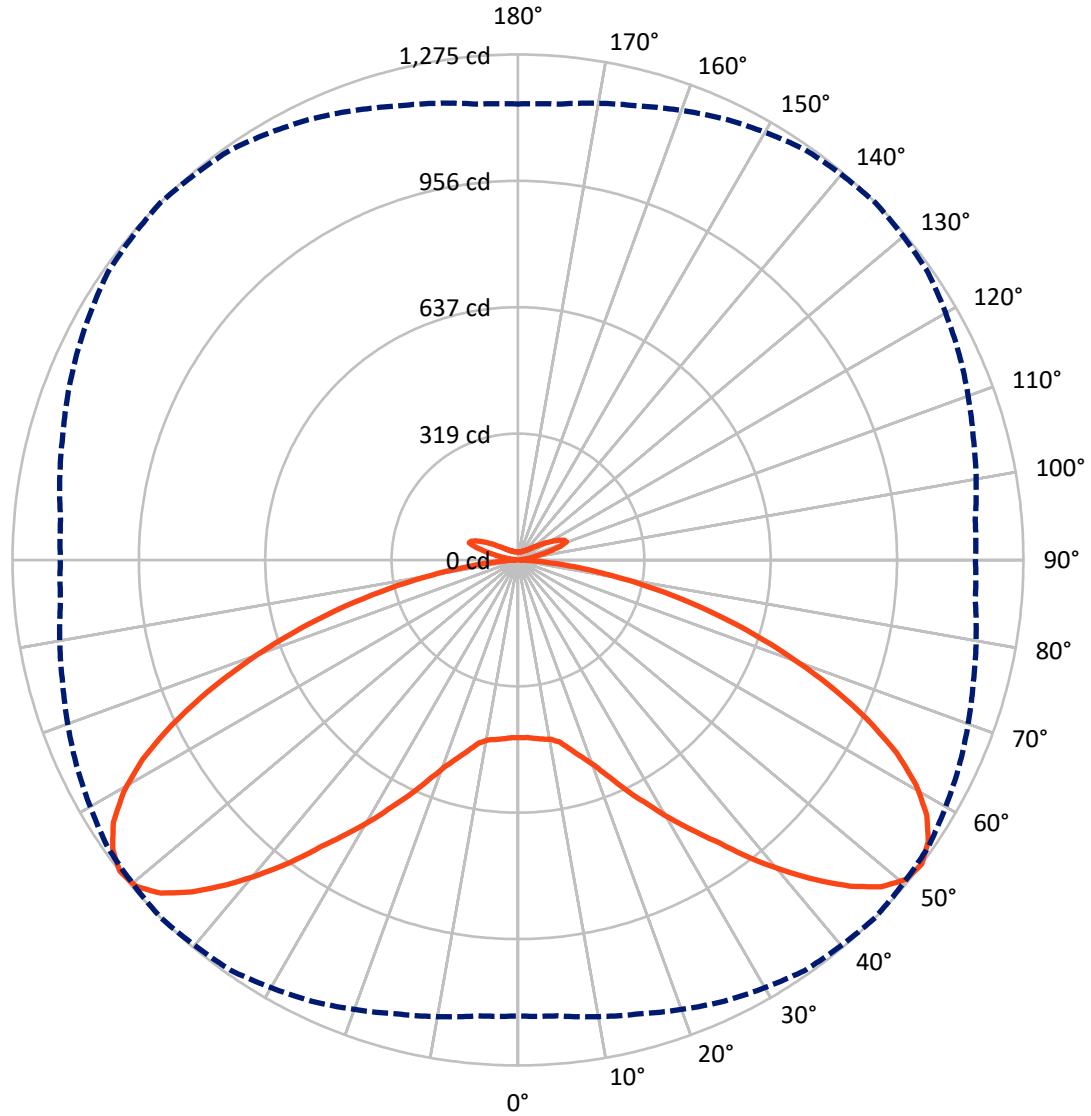
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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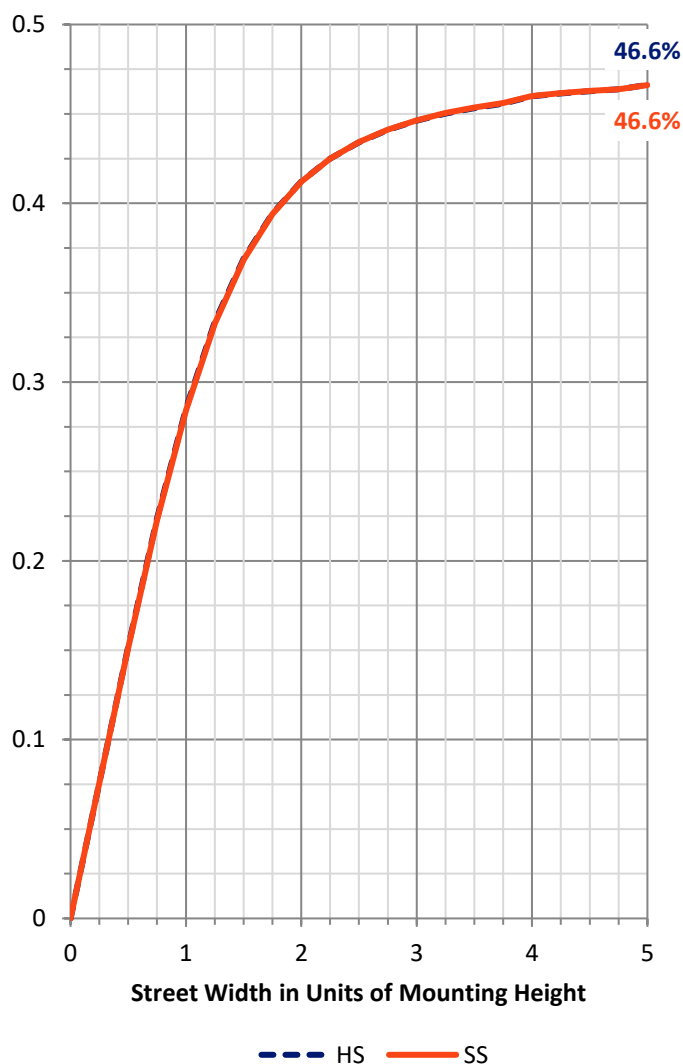
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2204.7	147.7	2352.4
	% Fixture	46.9	3.1	50.0
Street Side	Lumens	2204.7	147.7	2352.4
	% Fixture	46.9	3.1	50.0
Total	Lumens	4409.4	295.5	4704.9
	% Fixture	93.7	6.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	0.9
10°-20°	142.3	3.0
20°-30°	300.3	6.4
30°-40°	548.5	11.7
40°-50°	873.2	18.6
50°-60°	1055.9	22.4
60°-70°	887.8	18.9
70°-80°	470.6	10.0
80°-90°	87.5	1.9
90°-100°	6.6	0.1
100°-110°	67.0	1.4
110°-120°	98.0	2.1
120°-130°	56.9	1.2
130°-140°	30.1	0.6
140°-150°	17.9	0.4
150°-160°	11.0	0.2
160°-170°	6.0	0.1
170°-180°	2.0	0.0
0°-90°	4409.4	93.7
0°-180°	4704.9	100.0

Coefficient of Utilization

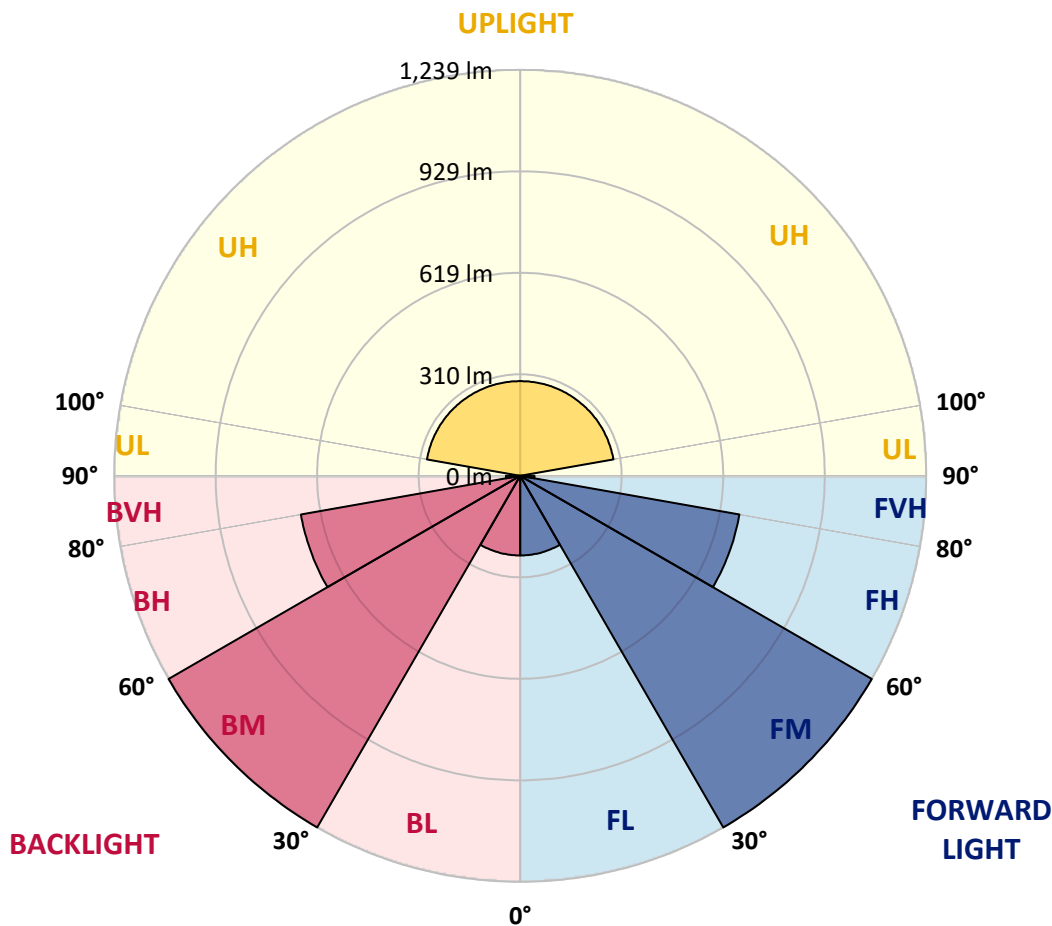


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	242.9	5.2			
FM (30°-60°)	1238.8	26.3			
FH (60°-80°)	679.2	14.4			G1/1800
FVH (80°-90°)	43.7	0.9			G1/100
BL (0°-30°)	242.9	5.2	B1/500		
BM (30°-60°)	1238.8	26.3	B2/2500		
BH (60°-80°)	679.2	14.4	B2/1000		G1/1800
BVH (80°-90°)	43.7	0.9			G1/100
UL (90°-100°)	6.6	0.1		U1/10	
UH (100°-180°)	288.9	6.1		U3/500	

BUG Rating: B2-U3-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
5°	452.1	452.1	448.3	452.1	452.1	452.1	452.1	452.1	452.1	452.1	452.1
7.5°	452.1	452.1	452.1	456.0	456.0	456.0	456.0	452.1	452.1	452.1	452.1
10°	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9	459.9
12.5°	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6	471.6
15°	491.1	491.1	491.1	491.1	495.0	495.0	495.0	491.1	491.1	491.1	491.1
17.5°	514.5	514.5	518.4	518.4	522.3	522.3	522.3	518.4	514.5	518.4	514.5
20°	549.6	549.6	549.6	553.5	557.4	557.4	557.4	549.6	549.6	549.6	549.6
22.5°	588.6	588.6	588.6	592.5	596.4	596.4	596.4	588.6	588.6	588.6	588.6
25°	635.3	635.3	635.3	639.2	643.1	647.0	647.0	639.2	635.3	635.3	631.4
27.5°	682.1	682.1	689.9	693.8	697.7	697.7	697.7	689.9	686.0	686.0	686.0
30°	736.7	736.7	744.5	748.4	756.2	756.2	756.2	744.5	740.6	736.7	736.7
32.5°	787.4	791.3	799.1	806.9	814.6	814.6	818.5	803.0	795.2	791.3	791.3
35°	841.9	845.8	853.6	865.3	873.1	877.0	880.9	865.3	853.6	849.7	849.7
37.5°	904.3	908.2	919.9	931.6	947.2	955.0	958.9	935.5	916.0	908.2	908.2
40°	974.5	978.4	990.1	1005.6	1021.2	1029.0	1032.9	1009.5	990.1	982.3	978.4
42.5°	1032.9	1040.7	1052.4	1075.8	1091.4	1103.1	1103.1	1075.8	1052.4	1040.7	1040.7
45°	1087.5	1095.3	1114.8	1138.2	1161.6	1173.2	1169.4	1142.1	1114.8	1099.2	1095.3
47.5°	1130.4	1138.2	1161.6	1188.8	1220.0	1231.7	1227.8	1196.6	1161.6	1142.1	1138.2
50°	1153.8	1157.7	1184.9	1223.9	1255.1	1266.8	1259.0	1227.8	1188.8	1161.6	1157.7
52.5°	1149.9	1153.8	1184.9	1227.8	1262.9	1274.6	1262.9	1227.8	1188.8	1157.7	1153.8
55°	1126.5	1130.4	1161.6	1208.3	1243.4	1255.1	1243.4	1208.3	1165.5	1134.3	1130.4
57.5°	1083.6	1087.5	1118.7	1165.5	1204.4	1216.1	1200.5	1161.6	1118.7	1087.5	1087.5
60°	1021.2	1025.1	1056.3	1107.0	1142.1	1153.8	1134.3	1103.1	1060.2	1025.1	1021.2
62.5°	939.4	939.4	974.5	1025.1	1056.3	1071.9	1052.4	1017.3	978.4	939.4	943.3
65°	841.9	838.0	873.1	919.9	955.0	966.7	947.2	916.0	877.0	841.9	841.9
67.5°	740.6	740.6	767.9	806.9	838.0	849.7	830.2	803.0	771.8	740.6	740.6
70°	631.4	631.4	650.9	689.9	717.2	725.0	713.3	686.0	658.7	631.4	631.4
72.5°	522.3	518.4	537.9	569.1	592.5	600.3	588.6	573.0	541.8	522.3	522.3
75°	413.2	409.3	421.0	448.3	467.7	475.5	463.8	452.1	428.8	413.2	413.2
77.5°	307.9	304.0	315.7	339.1	350.8	354.7	346.9	339.1	319.6	307.9	307.9
80°	210.5	206.6	214.4	230.0	241.7	241.7	237.8	233.9	218.3	210.5	214.4
82.5°	124.7	120.8	128.6	140.3	148.1	144.2	144.2	140.3	128.6	124.7	124.7
85°	54.6	50.7	54.6	62.4	70.2	66.3	66.3	66.3	58.5	54.6	54.6
87.5°	7.8	7.8	7.8	11.7	15.6	11.7	11.7	11.7	7.8	7.8	7.8
90°	2.5	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5
92.5°	2.5	2.5	2.5	3.5	4.0	3.5	4.0	3.0	3.0	2.5	2.5
95°	3.0	3.0	3.5	4.5	5.6	6.1	6.1	3.5	3.5	3.0	3.0
97.5°	4.0	4.5	4.5	5.6	9.1	16.7	10.1	5.1	5.1	4.5	4.0
100°	6.6	7.1	7.1	12.6	26.8	35.9	25.8	13.1	9.6	7.1	7.1
102.5°	21.2	22.2	27.3	40.9	60.7	55.1	46.5	44.0	30.3	24.3	23.3
105°	54.1	53.6	57.6	68.2	84.9	83.4	76.8	69.8	60.2	55.6	55.6
107.5°	71.3	71.3	74.8	83.9	96.6	112.7	114.2	90.5	79.4	74.3	73.8
110°	80.4	80.4	83.4	91.0	107.7	130.4	129.4	111.7	98.1	91.5	90.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	82.4	82.9	86.9	98.6	116.8	126.9	122.3	115.3	109.2	104.1	103.1
115°	85.4	85.4	90.0	101.1	111.2	115.3	110.2	104.6	100.6	98.6	99.6
117.5°	84.4	85.9	86.9	93.0	99.6	102.6	100.1	92.5	89.5	88.5	86.9
120°	78.4	78.4	79.4	82.4	85.9	87.5	86.4	81.4	78.9	78.4	77.3
122.5°	69.8	70.3	69.8	71.3	73.8	75.3	74.3	70.3	69.3	69.3	68.2
125°	61.2	61.2	60.7	61.7	63.2	62.7	63.2	61.2	60.7	60.7	60.2
127.5°	55.1	54.6	53.6	54.1	54.6	54.6	55.1	53.1	53.6	54.1	53.6
130°	49.0	49.0	48.0	48.0	48.0	47.0	48.0	47.0	47.5	48.0	48.5
132.5°	43.5	43.5	42.0	41.5	41.5	41.5	42.0	41.5	42.5	43.5	43.5
135°	38.9	38.9	37.4	37.9	37.9	37.4	37.9	37.4	38.4	38.9	38.9
137.5°	35.4	35.4	34.4	34.4	34.4	33.9	34.4	34.4	34.9	35.9	36.4
140°	32.4	32.4	31.8	31.8	31.3	31.8	31.8	31.8	32.4	32.9	32.9
142.5°	30.8	30.3	29.8	29.3	29.8	29.8	29.8	29.3	29.8	30.8	30.8
145°	28.3	28.3	27.8	27.8	27.8	28.3	27.8	27.8	28.3	28.3	28.8
147.5°	26.8	26.8	26.3	26.8	26.8	26.8	26.8	26.3	26.8	26.8	27.3
150°	26.3	25.8	25.3	25.8	25.8	25.3	25.3	25.3	25.3	25.8	25.8
152.5°	24.8	24.8	24.3	24.8	24.3	24.3	24.3	24.3	24.3	24.8	25.3
155°	23.8	23.8	23.3	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
157.5°	22.7	23.3	22.7	22.7	22.7	22.7	22.7	22.7	22.7	23.3	23.3
160°	22.2	22.2	22.2	22.2	21.7	21.7	21.7	22.2	22.2	22.2	22.7
162.5°	21.7	21.7	21.7	21.7	21.2	21.2	21.2	21.2	21.7	21.7	22.2
165°	21.7	21.2	21.2	21.2	20.7	20.7	20.7	20.7	21.2	21.7	21.2
167.5°	20.7	20.7	20.7	20.7	20.7	20.2	20.2	20.7	20.7	20.7	21.2
170°	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.7
172.5°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.2	20.2	20.7	20.7
175°	20.7	20.7	20.7	20.7	20.2	20.2	20.2	20.7	20.7	20.7	20.2
177.5°	20.7	20.7	20.7	20.7	20.2	20.7	20.7	20.7	20.7	20.7	20.7
180°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7

(END OF REPORT)